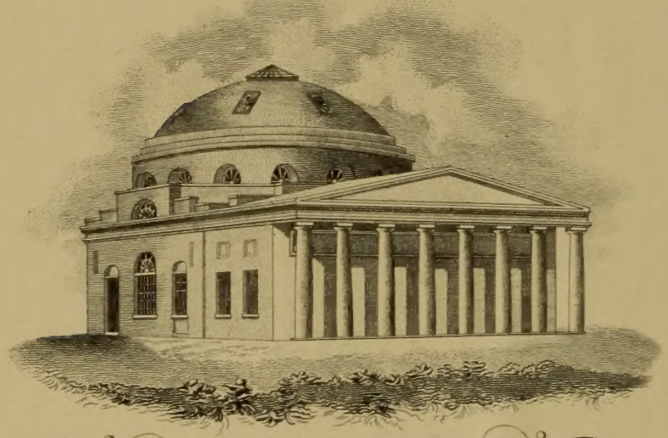
SEP 25 1940

LIBRARY
OF THE
School of Medicine



University of Maryland

University of Maryland Theses

Early Doctor of Medicine and Doctor of Physic Dissertations with Corrected Tables of Contents

These manuscripts described as either an Inaugural Dissertation or an Inaugural Essay were presented to the University of Maryland for the Degree of Doctor of Medicine and/or Doctor of Physic during the years 1813-1887. The individual dissertations were bound together during the 1940's. The original tables of contents for the bound volumes contained multiple errors in authors' names, titles, and/or years. To address these errors, an additional "Corrected Table of Contents" has been inserted at the beginning of each volume.

The project team who investigated and corrected the tables of contents were Richard J. Behles, Historical Librarian/Preservation Officer; María Milagros Pinkas, Metadata Management Librarian; Angela Cochrane and Carol Harling-Henry, Resources Division; Sarah Hovde, Abra Schnur and Megan Wolff, Services Division.

These dissertations were digitized in 2011-2012 and are available at the UM Digital Archive (archive.hshsl.umaryland.edu) and the Internet Archive (www.archive.org).

(CORRECTED TABLE OF CONTENTS)

UNIVERSITY OF MARYLAND

THESES

1860 (c)

Author	Title
Harding, Hiram William	Typhoid Fever
Sedwick, William A.	Inflammation of the Kidney or Nephritis
Walker, Henry H.	Mechanism, Uses, etc. of the Pelvis
Beck, Samuel	Syphilis
Benson, Charles W.	Respiration
Bradwater, Joseph E.	Extremes of Temperature
Boyle, Daniel S.	Abortion
Fay, George W.	Malaria
Lee, Daniel	Natural Labor
Owings, Harry W.	Diabetes
Dewling, Isaiah	Vascular System
Holton, Thomas Smith	Science of Medicine
Edelen, Henry C.	Jaundice
LeCato, Edwin William	Pneumonia
Naylor, Henry L.P.	Pneumonia
Pue, William H.	Variola

HSHSL 2012 for the UM Digital Archive. Sources consulted for corrections: Original Dissertation; University of Maryland Medical Faculty, Matriculation List, 1821-1851; Cordell, Eugene F. "University of Maryland, 1807-1907" (New York : The Lewis Publishing Company, 1907), Volume 2.

Author	Title
Baxley, Claude	Inguinal Hernia
Eareckson, Edwin	Malarious Fevers

HSHSL 2012 for the UM Digital Archive. Sources consulted for corrections: Original Dissertation; University of Maryland Medical Faculty, Matriculation List, 1821-1851; Cordell, Eugene F. "University of Maryland, 1807-1907" (New York : The Lewis Publishing Company, 1907), Volume 2.

UNIVERSITY OF MARYLAND

THESES

1860 (c)

Harding, H. Wm.	Typhoid Fever	21p.
Sedwick, W. A.	Inflammation of the Kidney or Nephritis	18p.
Walker, H. H.	Mechanism, Uses, etc. of the Pelvis	23p.
Beck, Samuel	Syphilis	18p.
Benson, C. W.	Respiration	27p.
Bradwater, T. E.	Extremes of Temperature	24p.
Boyle, D. S.	Abortion	19p.
Fay, George W.	Malaria	33p.
Lee, D. E.	Natural Labor	18p.
Owings, H. W.	Diabetes	39p.
Dewling, Isaiah	Vascular System	25p.
Holton, T. S.	Science of Medicine	14p.
Edelen, H. C.	Jaundice	22p.
LeCato, E. Wm.	Pneumonia	38p.
Naylor, H. L. P.	Pneumonia	36p.
Pue, Wm. H.	Variola	31p.
Baxley, Claude	Inguinal Hernia	26p.
Eareckson, E.	Malarious Fevers	33p.

UNIVERSITY OF MARYLAND
LIBRARY
Founded 1813
SCHOOL OF MEDICINE

AN

Inaugural Dissertation

ON

Typhoid Fever

Submitted to the Examination

of the

Provost Regents & Faculty of Physic

of the

UNIVERSITY OF MARYLAND

for the

Degree of Doctor of Medicine

by

Hiram Wm Harding
Va

Feb. 10th 1860.

Typhoid Fever.

This disease now under consideration is ranked under the head of Idiopathic Fevers. As the whole human race is subjected to it more or less, it is necessary that we should become acquainted with its most important and characteristic symptoms. It is absolutely essential for the practitioner to become thoroughly acquainted with the whole nature of the disease, that he may apply his remedies with skill. And for this reason I have endeavored to study it carefully through all its variations.

This disease sometimes commences suddenly in the midst of apparent health, but more frequently comes on insidiously, and increases gradually, so that it is difficult even for an intelligent patient to state the exact time of commencement.

The attack is ushered in generally with chilliness, general lassitude, soreness of the limbs, pain in the head and back, the skin is heated, pulse accelera-ted,

the tongue is slightly coated with whitish fur, and the appetite impaired. The onset of the Fever is sometimes marked by shiverings with nausea and vertigo. These go on increasing until the patient presents the phenomena of Fever. The pulse becomes more frequent than in health, the skin increases in heat and dryness, with thirst and head-ache, which is a dull heavy pain in the front part of head, and sometimes over one of the eyes. The pulse varies greatly in different cases.

Sometimes it is slower than natural, weak and compressible; but more frequently it is greatly accelerated. It is more accelerated in those of an irritable constitution.

In some cases the pulse may not exceed 90 or 100 in a minute, and of considerable fulleness and strength, in others, (especially females), it may increase to 140 or 160 and be small and compressible. The pulsations are

sometimes small, irregular, and intermittent, also dicrotic. The steadiness of the pulse is of more importance than the frequency.

The complexion of the patient presents a dusky appearance with flushed face of a purplish tint.

Epistaxis or hemorrhage from the nose occures in the first stage, and is generally slight. This is one of the diagnostic signs.

Diarrhoea is a very important and characteristic sign appearing almost in all cases. Even when absent the bowels present a peculiar tendency to be easily acted on by cathartics. It commences at the first stage of the desease, but sometimes it is postponed to a later period, at others it precedes the fever. It is generally attended with pain or uneasiness in the abdomen, which is increased by pressure, especially in the right iliac region.

The evacuations are generally of a yellowish or brownish

appearence and presenting a healthy appearence except in quantity. Sometimes they are thin yellowish discharges like pea-soup. These are caused by inflamation or irritation of the mucous membrane of the intestines.

Hemorrhages from the bowels are very important signs and should be carefully attended to. It often takes place unexpectedly, sometimes in considerable quantities or in small quantities, at shorter intervals. The blood is red and but little changed, at others it is blackish. Whenever it does occur, it may be considered as a very bad symptom, as it debilitates the patient greatly. The abdomen is found distended and Tympanitic. If the hand be pressed over the cæcal region a gurgling sound is produced, and is said to be produced by the movement of an intermixture of fluid and gass in the intestines.

After the elapse of a week, or sometimes earlier, the patient is attacked with Bronchitis. The cough is either dry and

hacking, or attended with a slight mucous expectoration. The eyes are suffused with water. The patient protrudes his tongue with difficulty, and may be observed to tremble in so doing. We see by these symptoms that all the functions and powers of the animal life are greatly depressed.

Rose Spots. These are one of the most important of the characteristic signs. They generally make their appearence about the seventh, or fifth days, sometimes not until the latter part of the disease. These red spots like flea-bites, first appear on the abdomen in small numbers, but afterwards increasing and spreading to the chest, and even to the limbs and face. They are round and slightly prominent, disappearing under pressure, but returning after the pressure is removed. They vary greatly in number, sometimes not more than two or three, at others being so numerous as to be almost countless. They appear in crops, lasting three or four day, then gradually fading. Though

present in the majority of cases in this disease, they are not found in all.

Sudamina are sometimes found by careful examination on the neck and breast of the patient. They are small vesicles of an oval shape about the size of a pin's head perhaps larger, and of a transparent color. On account of their minuteness they have to be viewed obliquely.

Petechiae, is an emption (if it may be so called,) which sometimes appeare in this disease, but more characteristic of Typhus. They consist of dark colored spots, caused by the minute extravasation of blood under the cuticle. They differ from the rose spots, in not being elevated above the surface of the skin, and not disappearing on pressure.

As the disease advances the tongue becomes dryer and assumes a brownish color. The patient lies breathing with his mouth open, which makes it dry and causes deglutition to become painful or difficult. Sordes accumulates on the

teeth and lips of a dark color.

The patient now is relieved of the head-ache which has last ed about a week, but is followed by a more serious substitute, Delirium. This is generally mild. But in some instances it is violent and requires force to restrain the patient from rising out of his bed. In the last stages it is frequently low and muttering. The patient lies with his eyes half closed may be observed to pick at the bed clothing.

Ringing or buzzing in the ears, followed by hardness of hear ing, is an important and peculiar feature in this disease. It is so bad in some cases as to produce deafness. This does not usually occur until advanced stages.

Either from debility, or paralysis of the sphincters, the pati ent suffers from incontinence of urine or retention.

We should not be deceived by supposing that the involon tary stillicidium of urine would be sufficient to prevent it from accumulating in the bladder, for sometimes it is

enormously distended. Therefore in the latter stages, it would be well for the practitioner to examine daily the condition of the bladder by percussion over the pubes, and if found distended, draw it off by the catheter. If care and attention be not exercised, there may be fatal results produced.

The urine is generally deficient in quantity, and of higher color than in health.

There is a strong tendency to sloughing of the skin, especially the parts subjected to pressure, as the sacrum, and hips. This is caused by the diminished vitality, and feble capillary circulation of the parts.

When this disease is about to terminate favorably, the temperature of the skin becomes more natural, the tongue begins to clean at the tip and edges, and becomes more moist, the pulse is less in frequency. The patient takes more interest in his own case, and the things around him. And when he feels the necessity of evacuating the

bowel he lets it be known. They are less in frequency, and are more consistant and healthy. As the patient resumes a more natural appearence of countenance his emaciation becomes more evident. In some cases the amelioration is so gradually, that it is difficult to state the accurate time of commencement.

Sometimes, the tongue, instead of cleansing itself at the tip and edges, throws off its fur in flaxes from the center. If the tongue that has been cleansed remains moist convalescence may be expected.

The tongue is one of the criterion by which we have to be governed, in the progress and treatment of this disease. As an amelioration of the symptoms begin, the appetite returns, and sometimes is ravenous. Therefore the patient should be carefully guarded in his diet. If not, it might be the cause of a fatal relapse.

The period of convalescence is variable. It may begin on the

eighth, or ninth day, but very seldom before the third, or fourth week.

Death, may take place on the sixth, or seventh day, but generally not before the third, or sixth week. The most common mode of death in this disease is by coma.

The case that is to terminate fatally, the pulse becomes either weak and excessively frequent and fluttering, or, so slow as to be scarcely perceptible. The extremities become cold, and the whole body is bathed in a copious, clammy sweat. The muttering, half-conscious stupor, which at first, the patient might be roused, mostly leaves, and becomes gradually profound and death-like.

The patient may be seized with violent pains in the abdomen and tenderness on pressure. The pulse become contracted and very much accelerated. These may continue to increase, which may produce perforation of the intestines, or set up peritonitis with all its fearful and dis-

-tressing symptoms and by this deprive the patient of his life.

Anatomical Lesions.

There are to be found in the ileum, peculiar minute bodies mostly of an oblong form, and most thickly settled in the lower part, called, the glands of Peyer. These are found remarkably changed. At first they are enlarged and thickened. They are then, more perceptable than in the healthy state. As the inflamation advances, they slough or ulcerate, which makes them present an irregular, ragged, thickened ulcer. Some of them are pale and gray; some dark red, others are yellow. The ulceration increases until they form a large ulcer, this continues until perforation is produced, either in this way, or by mortification. These explain the cause of the diarrhoea, hemorrhages, and pains experienced by pressure in the right iliac region. The minute solitary glands, and the mesenteric, are enlarged, redened, and softened, sometimes

pus may be found in them. The colon, is found distended with air or gass, which has produced the Tympanites. The spleen, is altered very much in almost all cases, it is enlarged, of a dark bloody color, and consists of a soft rottery pulp.

Causes.

The exciting causes are, too great fatigue, exposure to the vacissitudes of weather, and mental disturbance. It is thought to be caused also by persons who are crowded together in close, confined, and vitiated air, of prisons, camps, and other places, where the human effluvia arrises from their bodies in a state of decomposition. Some seem to have a predisposition to it, and it may be lurking in the system for some time, until some exciting cause interferes, and is the cause of it making its self evident. The true cause we believe is a specific poison in the blood. It is generally admitted to occur only once in the same person. This explains its comparitive rareness and

infrequency in old aged persons. It rarely attacks a person at the age of thirty, or forty and very seldom at fifty.

Diagnosis.

This is one of the most important branches that belong to Pathology. It should be carefully studied, and understood; for no one can be a skillful and successful practitioner, unless by close observations, and particular attention, they study the diagnosis of diseases. It is important to form a correct diagnosis at the beginning of the disease, because it clears the way, and enables the practitioner to cope with an adversary so formidable to man. Besides, it is highly satisfactory, not only to the physican, but also, to the family or friends of the patient.

The practitioner, (especially the young and inexperienced) should never be too hastily in his decision at the commencment of this disease. At the begining of this disease, it is often

impossible to decide with accuracy upon its character.
The most marked symptoms of this disease are, the dull or heavy expression of the countenance, the dusky hue of face, diarrhoea or a tendency to it at the begining, cough, epistaxis, and after the seventh day or later, dryness of the tongue. Sordes accumulates on the teeth, deafness, stupor or delirium, the rose colored eruption, sudamina, tympanites, and the slow and insidious attack.
It is not necessary that all of these should be present to constitute Typhoid Fever. This disease is apt to be confounded with remittent fever. It may be distinguished from that, by the absence of diarrhoea, hebetude of expression, stupor, tympanites, and rose-colored spots. Also as intermittent has a tendency to remit, yellowness of the skin, and shortness of duration. The anatomical lesions also confirm the diagnosis. In the remittent there is a total absence of the diseases of the Mesenteric, and Peyer's glands, which are

I believe never absent, but are affected more or less in Typhoid.

Prognosis.

This should be given with caution in all diseases, but more particular, in the one we are now considering. This Fever differs greatly in the grade of its severity. In some cases, and under peculiar circumstances it, may be mild, in others severe. If the patient be young, and the previous state of his health good, the prognosis is more favourable. In some cases every symptom may, and all things seem to be ameliorated, and the patient appear convalescent, when in an instant, as by a blast of the tempest, all things change in opposition, and frail humanity seem as if to be shattered into atoms. Still we should not give up in despear, but adopt the sentence of Cicero. "Ægroto dum anima est, spes est". And endeavor to assist nature in the recovery, as much as we can while life remains. The most unfavorable symptoms are, extreme

feebleness, and excessive frequency of the pulse, great abdominal distention, colliquative sweats, subsultus tendinum, profound coma or continued delirium, abundant diarrhoea, hemorrhages from the bowels, stertorous breathing, and excessive debility. The favourable symptoms, the pulse assumes a more natural beat, retardation of the discharges, the patient takes more notice of things, and the tongue becomes, and retaines its moisture.

Treatment.

The treatment of this disease has been, and is at present very fluctuating and unsettled. Indeed, I believe there is no absolute rule of treatment. This disease, like all other disorders which run a definite course, has a natural tendency to the repairment of health. But it is necessary that it should have assistance and guidance to the restoration of health. It is I believe useless to try to cut short this disease, but it is our duty, as phycians, and humanity

calls upon us, to try to mitigate its distressing symptoms, and render the patient as comfortable as possible.

It is my candid opinion (and I have been taught), not to confine our practice to certain remedies, or use specific medicines for certain disease, but to observe carefully, every change in the disease, and prescribe those remedies which our careful attention, and sound judgement, think best-suited to the case.

In the first place, it is necessary to remove all sources of irritation, internally, externally, or mentally.

Emetics are useful in the first stages, especially if gastric disturbance is a prominent symptom, we find them followed by mitigation of these, and others.

Cold ablutions have been recommended greatly, for abating the morbid heat, and soothing the uneasy feelings of the patient, by sponging the legs, arms, and temples, frequently.

The bowels should be evacuated by some mild aperient, to get rid of all iretating matters.

Draitics, should neve be employed, as there exists at the begining, diarrhea or a tendency to it. And we know this is a debilitating and protracting disease of its self, we should try to husband the strength of the patient, so that nature may have the power to recuperate. Castor oil is the best cathartic for removing any offending substance from the bowels, as it does not iretate the mucous membrane of the bowels, no more than to remove the offending cause, but rather soothes.

In regard to blood-letting, in this disease, there are various opinions. Whenever employed it should be at the begining of the disease, and never, unless the febrile symptoms are unusually high, or congestion and inflamation of the brain, or some other vital organ, is threatening. The patient should be in the upright posture, and take no more than

is absolutely necessary to relieve the inflamitory symptoms. For my own part; I much prefer local, such as, cups or leeches, applied over, or near the place of inflamation.

Blue mass, in minute doses, given at short interals, in combination with Ipecac, have been found sometimes, useful in softening the skin, and promoting secretions.

When there is great depression of the nervous system, with restlessness, jactitation, and sleeplessness, or twitchings of the muscles, great benefit is found by the employment of the nervous stimulants, as, Hoffmann's Anodyne, Camphor water, or Sweet Spirits of Nitre. I prefer these, to Opium, as they may be used, when Opium is not indicated, by coma or inflamation of the brain.

From the debility that always attends this disease, (or any protracted disorder,) it is highly important, that we should use all possible means, to support the failing powers, until the depressing influence, of the exciting cause be diminished,

or annihilated. We find nothing so suitable for this, as tonics, stimulants, and farinaceous articles of food, judiciously employed. In the administration of them, we should be guided by the typhoid symptoms, and their action on the pulse and brain. If the pulse be slow and feble, the skin cool, the tongue incrusted with dark sordes, there would certainly be no impropriety in the administration of them.

If they be found to increase the frequency of the pulse, or augment the stupor or coma, they should at once be abandoned.

Perhaps, it is best to commence with those of less strength as Wine-whey, and as the strength becomes reduced, it would be advisable to give, Carbonate of ammonia in doses from five, and a half, to seven or eight grains in emulsions, every hour or two, with beef-tea. Or, wine, brandy, milk-punch, or eggs-flip should be given. Serpentaria and Sulph. Quinine are given also in combination with Sweet-Spt. of Nitre.

The diet in the early stage, should be light, as a weak solution

of Tapioca, sago, or arrow-root, and toast. As prostration advances the patient should be allowed something stronger, as a cup of tea and dry toast, animal broths, and jellies.
As a drink cold lemonade, or ice water (if desired) should be given in moderation.
The patient should be in a large room, well ventilated, placed on a clean dry bed, and all annoyances should be carefully avoided.
The parts subjected to pressure should be examined daily, and if found red, should be washed in brandy, or apply the lead plaster. And downy pillows placed under the parts.

Gentlemen.

Now in conclusion, I submit to your consideration this thesis, with all its imperfections, as I have endeavored to do my duty to the utmost of my ability, and judgment.

Hiram Wm Harding

An

Inaugural Dissertation

on

Inflammation of the Kidneys, or Nephritis

Submitted to the Examination

of the

Provost, Regents & Faculty of Physic

of the

Un. of Maryland,

for the Degree of Doctor of Medicine.

by

W. A. Fredrick

1860

Inflammation of the Kidneys or Nephritis

Before commencing the subject of Nephritis, a few remarks on the Anatomical Structure of the Kidneys can scarcely be considered a miss. I think, in this place. The Kidneys the great secreting organs of the urine, are situated in the lumbar regions on both sides of the Vertebral Column.

They are about four or five inches in length, two & half in breadth, and a little more than one in thickness: the right being somewhat lower than the left owing to the position of the Liver. They are dense & fragile in texture, composed of Arteries, Veins, Nerves, Lymphatics & Muscular tissue each performing its respective office. It is also invested by a fibrous

capsule which is easily torn from its surface. From the peculiarity of the general structure of its glands it may be easily recognised from all the secreting ducts: being composed of numerous secreting tubes, known as Tubuli Uriniferi, collected in bundles, in from ten to twenty separated conical portions, called the Cones of Malpighi, constituting the Tubulous portion of the Kidneys. The Apices of these cones converge & project into Calyces which are branches of a large cavity, called the pelvis of the Kidneys, which leads to the Ureters ---

Sufficient, I think & hope, has already been said in regard to the Anatomy of the Kidneys, for I do not wish to go into specialities; but

the first Course to which I respectfully call your attention, is diseases from which No organ in the human frame is entirely exempt— To make an attempt to speak of the numerous diseases & complications to which it is subjected will not be attempted, but simply of Acute Inflammation— Inflammation may attack the Kidneys in various forms & grades = It may be seated in the investing Coats of the Gland = in its substance &c. or two or more of them conjointly— The most commonly affected parts, known are the Pelvis & the Calyces = Different names have been given to the diseases occupying different localities, but of little practical importance. Since it is very difficult to designate one from the other,

but the treatment should be directed more to the violence of its symptoms, and the origin of the disease, than its immediate locality -

Nephritis has many other divisions but the most important, & one recognised by all the medical profession, are the Acute & Chronic - the former of which I shall speak -

The most prominent symptoms of this form of the disease, are deep seated pains in the small of the back. Sometimes very sharp & acute, then again dull & obtuse: the pain extending generally downwards to the Ureters, the Groins, Scrotum, inside of the thigh &c &c; increased by firm pressure near the region of the kidneys.

Sudden jars, quick change of position,

Some coughing, pain in Respiration &c.

When one side alone is affected the patient most commonly lies on the opposite side. There is generally a disposition to Micturate frequently although the urine is sometimes scanty.

The Urine passed is very scanty, usually high Colored, sometimes mixed with Blood. In some cases the Urine is clear & healthy, owing to one side being affected, and then it comes from the healthy side, in consequence of obstruction of the diseased side.

The Urine is always suppressed when both sides are affected at once, Consequently Convulsive Symptoms usually supervene.

This form of Nephritis is always attended with fever. Pain

cedent rigors, which, in severe cases set in with pains. Sometimes the fever is very high, attended with headache, thirst, hot dry skin, and a strong pulse. It generally takes of a remittent form, but occasionally intermittent is asserted to have appeared—

The Stomach is almost always involved, particularly in the severer cases, accompanied by nausea & vomiting; the vomited matter ~~matter~~ of a urinous smell — The bowels constipated &c — —

When Nephritis is of a calculous origin, the pain is often very severe and spasmodic, suffering intensely during the movements of the calculus in the pelvis of the kidneys; and the most

excruciating pain is experienced during its passage through the Ureters.

The presence of Calculous deposits in the Urine, the sudden cessation of pain giving evidence of a stony Calculus in the bladder —

The Gouty form may be recognised by the Constitutional habit of the patient —. It may also be known by the character of the Urine, which as a general rule high Colored, and while in the other forms is generally deficient in the Uric Acid —

In its very acute form it is very rapid in its course, terminating either in resolution or showing signs of suppuration —

The occurrence of suppuration comes on with severe rigors,

weak and feeble pulse, and sometimes profuse night sweats.

In some cases the pus makes its appearance very rapidly, and then again slowly, the Urine first becoming opake, yellowish &c ....

Pus may be disseminated in different parts of the Kidneys; it may break through in the pelvis, & dischage itself with the Urine; or the purulent collections may go on producing so large a tumour as to be felt through the walls of the abdomen. These abscesses sometimes break through into the peritoneal cavity causing death instantly.

There are cases on record in which the matter has made its way in the cellular tissue of the loins, and found its way out through the skin.

Suppuration is not the most- fatal in
Acute Nephritis. Sometimes total
suppression of the Urine takes place,
with occurrence of Cerebral Symptoms,
as delirium, Coma, Convulsions &c. - - -

In such cases, the Urea & other
principles usually thrown off by
the Kidneys accumulate in the blood, &
act injuriously upon the brain -

Diagnosis — The complaints
with which Acute Nephritis is most liable
to be confounded are Nephralgia, Lumbago, Inflammation of the psoas Muscle,
and partial peritonitis.

In relation to most of them, it might
be sufficient to say that they are without
the dissidence & scanty Urine, the
disposition to Micturate frequently,
the retraction of the testicle, and the

pain shooting obliquely downward from the region of the kidney in the groin, which characterize Nephritis.

But Nephralgia is sometimes attended with all of these symptoms, and is to be distinguished only by the greater violence of the and more spasmodic character of the pain, and total absence of fever. Pain in the ureter passes is very similar to Nephritis, the testicle is sometimes retracted, but the other symptoms are wanting. One of the diagnostic signs of this disease is the increased pain on movement of the thigh on the pelvis—

In Lumbago, the pain is more superficial and greatly aggravated by walking an attempt to move from a sitting posture—for instance, attempt to rise.

In peritonitis there is vomiting, but the urinary symptoms, & peculiar direction of the pain is absent, there is greater tenderness on pressure, the pulse is small & corded, the expression of the countenance peculiarly anxious - - - -

Causes — Mechanical violence, as blows, falls, concussions or penetrating wounds; exposure to cold & wet; drinking cold water while in perspiration; the abuse of alcoholic drinks; irritating substances taken internally, and used externally also, as oil of Terpentine, Cantharides; corrosive sublimate taken in too large doses &c - - these with many other causes may be considered & enumerated among the exciting causes of Acute Nephritis - - - -

Gout not unfrequently gives rise to this disease,

One of the most frequent causes of this disease, however, is the presence of Calculus producing violent pain, and inflammation by its rough surface irritating the Mucous Membrane of the Kidney's — There are many other causes that give rise to Acute Nephritis, but can scarcely be of importance to mention in this place —

Treatment — In very severe cases where there is reason to suspect that the substance of the Kidney's are affected. And the pulse strong & full Blood should be taken freely from the Arm: And should the symptoms not abate he should resort to it again & again should the pulse emit.

Copious bleeding is sometimes necessary, evidently very hazardous in some

cases, particularly when it results from Uric Acid Gravel; but local bleeding should then be resorted to such as Cups, Leeches &c —

It is well to bleed however when the inflammation is sufficient — high to produce much fever.

After bleeding we should then turn our attention to the condition of the bowels, they should be well evacuated; purging is indicat. not only as a depletory, but as a revulsive means also —

The stomach most frequently being in a very irritable condition, Calomel is about the best agent we can prescribe, as it is not so likely to be rejected — Should the Calomel not prove sufficient or have the desired effect, it can be followed by the Hack —

drought, Castor Oil, Sulphate of Magnesia &c. When the pain is very severe, particularly of a Spasmodic character we should then resort to Opium, our Great Shut Anchor, given with Calomel sufficient to produce a decided impression upon the System. From one to three grains have been recommended; the latter quantity, I believe, advised by all Physicians should be given in smaller doses more frequently given in addition with Calomel —

Thus Calomel gr. iii . iv

Opium gr. j given

every two hours until the desired effect is obtained — This combination prepares the Stomach for the reception of Saline or Cleansing Cathartics.

In many cases Opium has to

objections, and also its preparations, owing often to the many and peculiar idiosyncrasies of the patients, then henbane should be substituted—

Copious enemata of warm water have also been thought useful, independently of what has been said—

It is well to aid the depletory measures by warm cataplasms or fomentations to the loins, the hip bath &c after copious evacuations of the bowels—the patient should, however, be protected well from taking cold—

As this stage of the disease advances, to relieve pain and restlessness, and also to quiet the stomach, an opiate enemata at bed time might be given, dose, from forty to sixty drops of Laudanum, in a wineglass of thin stand

thrown up the rectum. Should the stomach be in a proper condition to receive medicine (retention), instead of the anodyne enema at bedtime, a grain of opium, equal quantity of Ipecac, and a gr. or two of Calomel may be substituted, and followed in the morning by a mild cathartic -

One of the most prominent indications called for in this disease is to quiet the irritability of the stomach -

Should the anodyne, above mentioned not succeed - small doses of the effervescing draught - and a sinapism may be applied to the epigastrium -

Creasote has been recommended but of little repute -

When the stomach is retentive, free dilutions by mucilaginous drinks - as

gum Arabic water, flaxseed tea &c should be given, particularly in cases of mucous inflammation, acting by diluting the urine and rendering it consequently less irritating —

Citrate of potassa, in the form of effervescing draught, will be found an excellent adjuvant, whenever the skin is dry & hot; if the stomach is not at all irritated small doses of tartar emetic may be added —

When the disease is of a calculous disposition, particularly of a Uric acid or the Urates, bicarbonate of soda is an indispensable remedy; it should be given in half drachm doses three or four times a day, in three or four fluid ounces of Carbonic acid water, with or without syrup — The same remedy is sometimes recommended when it is of a Phosphatic origin.

The diet in this form of the disease, should be exclusively mucilaginous or farinaceous, and should be employed in the liquid state — In Acute Nephritis it must be remembered that no good can occur from stimulating diuretics. They would only increase the disease but the more.

Cerebral symptoms should be combated by cold to the head, leeches to the nape of the neck or temples — In all cases where the symptoms do not yield to the above treatment — and the system permits — we should resort to mercury until the gums are slightly touched —

W. A. S.

An

Inaugural Dissertation

On the

Mechanism, uses &c

of the Pelvis

Submitted to the Examination

of the

Provost Regents

and

Faculty of Physic

of the

University of Maryland

for the degree

of

Doctor of Medicine

by

Henry Hiram Walker

Anno Domini 1860.

To

Geo. J. Mitchenberger M.D.

Professor of Midwifery in

the University of Maryland.

In respect to him as

a gentleman, and a

teacher, This is most

respectfully inscribed

by the

Author.

Introduction

In presenting this to the Faculty of the University of Maryland, for their perusal. Knowing too that chiefly upon its merits will rest the attainment of the degree of Doctor of Medicine, I feel for various reasons deeply embarrassed. In the first place feeling the deepest anxiety, as must every one who presents himself before the impartial tribunal of an Institution relying upon his own capacity alone, for their highest token of confidence and regard. I fear that I have fallen far beneath their estimate of the qualifications that should be possessed by one who is to go forth as an individual representative of an Alma Mater, over whom they have presided — in this feeble result of a most strenuous effort

to treat as thoroughly as possible, and as plainly, and practicably, as my limited knowledge, and theory upon the subject will permit — Secondly as I believe it to be the custom, as far as I am enabled to judge, for each candidate to select his subject from the Principles & Practice of Medicine this being one of the first branches of the medical profession. and for other reasons, that they may treat to the best advantage, a subject plainly laid down, and comparatively easy in its investigation, it is but natural to suppose, that upon one so complicated, and when compared to many other branches of the science so remote in its comprehension, that I should submit with extreme diffidence an humble dissertation from my pen. But the Science of Midwifery possessing according to my-

opinion an inestimable, and unbounded interest to the Medical Student, holding forth in its irresistable, and powerful grasp Elements of an almost incomprehensible Science, Concealing in its intangible mesh-es so many all-important Theories and invaluable facts, should elicit the most profound, constant earnest, and unceas-ing Study, and reflection. I therefore have Chosen my subject from among the many enveloped in, and connected with this migh-ty Department of Medicine, and after having to the utmost extent of my ability arranged, and constructed, with careful thought, many of the Truths which bear upon it, as given by a number of Authors, I beg leave to submit it respectfully to your Scrutiny, disclaiming all credit to the originality of a single new idea, which my total want of Experience precludes from my power.

Mechanism, uses &c of the Pelvis.

In treating upon this subject, there are rules by which it is necessary for me to be governed, in order that the same manner of arrangement, should be carried out, as laid down by the standard authors of Midwifery. True it is, however that there are many points of difference between them, in almost every section, in which they divide their several subjects, nor do I propose to follow them through their minute intricacies of detail, setting forward the various disputed points, writing down the number of instances exemplified, and relating each individual case particularly. But it is my intent, to treat generally upon the whole, and to form from absolute facts, those which have been satisfactorily decided, a general-

idea of the Mechanism, uses &c. of the human female pelvis. — This consists of a hollow bony structure, named from its resemblance to a basin, situated just above the lower extremities, and below the lumbar vertebra, the sacrum and coccyx entering into the formation of its posterior wall, and lower portion. This is divided into four bones, in the adult, the two ossa innominata, the sacrum and the coccyx. These however in children at an early age, admit of a subdivision into several other parts, which as it must of course have some important bearing on the consolidated canal, as the subject is followed, had better be briefly described here. In the foetus at parturition, and in infancy & childhood, the os innominatum is nothing more than three cartilaginous points, developed from certain

centers, and which as life progresses, becomes matured into an osseous substance forming the whole, which for want of a more appropriate distinction is called conjointly, ossa innominata, and separately os innominatum. The sacrum at about the same stages of life, in the same manner, is divided into five pieces sometimes more, which are united like the os innominatum, about the same period of life, but unlike the latter is of bony consistence, while existing in intra uterine life. - Of the coccyx, the last important in the completed pelvis, it is scarcely necessary to speak, as it is hardly ever more than of a cartilaginous character, this attached by its upper extremity to the lower end

of the Sacrum, & tends downwards and forwards, and terminates near the anal orifice. This perhaps performs a somewhat prominent Mechanical part, by its remaining so much longer unossified, which gives it the property of imparting Elasticity to the perinæum. The Ossa Innominata, are the largest bone concerned in the pelvis, and as they are divided into three portions each, in infancy, they still are divisible into the same parts at a maturer age, and are called especially Ilium — Ischium, and Pubes. The first of these the Ilium, is the large laterally exposed portion, at the top, shaped somewhat like an ear, with a broad edge, and forming the bony boundary of the basin, at each side, it ascends in an arch like

manner down by the side of the Sacrum, over-lapping its lateral border, and joined to its latero-posterior surface. Anteriorly the descent is much more abrupt, curving outwards twice in a semeluna sweep, giving rise to two projecting points of bone, the upper, the anterior superior, and the lower the anterior Inferior Spinous process of the Ilium. Behind also are similar points of bone, likewise named from their position. Below the anterior Inferior Spinous process descending in an oblique line of a prismoidal shape, is the second division called the Ischium, which terminates in the large rounded knob or tubercle on which the body rests, when in a sitting position, From this there arises to a point half way between it and

The point of the pubis and the portion called the Ramus. The continuation of this obliquely upward to the end of the bone is the ramus of the Pubis. The third part or that cylinder of bone which extends in a direct line to the end of the Ilium, is the body. These converge to a common centre, where they unite in forming the point of this union a deep cup shaped cavity, in which articulates the head of the bone of the ~~lower~~ extremity. at the Symphysis pubis (which is the point of the two bones) - They are united by an intervening cartilage, which is a point of very great strength, and thus with the union of the Sacrum, and the Ossa Innominata, and the pubic joint. The whole bony canal of the pelvis is formed. Upon the exterior surface

there is attached by means of roughened surfaces, numerous ligaments, which by crossing and re-crossing the adherent edges of the several bony points bind them firmly, nay, indissolubly together rendering, their being torn asunder, by any violence however great, almost impossible.

Thus is formed, one of the firmest, and most resisting parts of the body, which by a wise Providence, was ordained in the woman, for the fulfilment of a twofold office, the one for the support of the pressure, always exerted upon it by the trunk, the other, by far the greatest, and most important, the accomplishment of reproduction. In man the bones of

the pelvis are thicker, and much stronger, than in females, the canal is much smaller, and more contracted - especially between the Ischium, in the former. - Indeed the formation of the whole pelvic region differs altogether in the female, from that of the male. This is a wise provision of nature, for while there is only one or two indications for the use of this part in the one, viz. to contain the viscera, and to support the body. - In the other it is for carrying on one of the great regenerative functions. For this purpose the bones ossa Innominata, are longer, broader, thinner and more exposed. The Sacrum has a much deeper and

wider curve, and the Tuber Ischii, are much wider apart. — The whole cavity is greatly increased by these differences, the bones which enter into its formation are more enlarged, so as to give the canal its proper compass, that the transit of the foetus, may be more easily effected. More space is also gained by the articulation of the coccyx with the sacrum, which being gingly moid or hinge like allows it to move backward and forward, as the force is directed from above, down upon the perineum. This perhaps deserves more remarks, than authors have made use of upon the subject, for surely it is a mechanical —

arrangement, the utility of which is seen in every difficult case, or in fact every case of labour. — The Pelvis is divided by a line which is found in the middle of the canal interiorly, running around on the margin of the pelvis, and body of the Ilii, ending at the junction of the Sacrum and Ilium. This line of demarcation is called Linea Ilio pectinea, and seperates the pelvis into two portions or Straits, which respectively, are named the Superior and inferior: this division is sometimes called also the True and False pelvis. The upper or Superior Strait embraces the broad space between the Ilii down to —

this time, the inferior is the long channel below the linea ileo pectinea, the course of these differ much as to their arrangement, and in order to understand the position of the fœtus in utero, and the course of the labor, it is best to discribe briefly the direction, the superior Strait commencing from the point of union of the sacrum with the last lumbar vertebra, called promminence of the sacrum, passing downward and backward in a very oblique manner, to the beginning of the inferior Strait, This then commences, and descending an oblique course downward, and forward, end under the arch of the Pubis.

The first of these descents is called the Inlet, the other, the outlet. In consequence of this varied course of this bony structure, several modifications are compelled to take place in the position of the child during its passages through the whole canal. — Various resorts are had by nature, to effect this, but sometimes in consequence of alteration in the natural direction, the enormous size of the foetal head, rendering nature impossible, it is impossible for her to accomplish the expulsion. And the interference of art is unavoidably necessated. — The pelvis when held in the hand, would

seem to occupy a different position in the body than it does. The acetabula are somewhat more in front, than towards the sacrum, and a line drawn from the crest or broad expanded edge of the Ilium to the acetabulum, would of course be a little oblique. It is therefore placed in its proper situation, with the crest inclining forward bringing the os pubis downwards, rather under the body, so that the obliquity is readily noticed in the position, as also the direction of the linea pectinea, which describes a circle, one part of which, the position is higher than the other, the anterior. The object of this is very plainly understood, the pelvis

as one of the divisions of the body contains several viscera, whose office belongs to this region, as the uterus, bladder, and rectum, all of which would have a strong tendency to pull down, were they not sustained by the pork of the pelvis, which is oblique, that they may be supported. Particularly is this the case with the im-pregnated uterus, which is con-stantly tending to gravitate. When the patient is in the erect posture, and the keeping of it in its proper situation is the most important usage to be ascribed to this peculiarity of situation. This is more readily, and clearly appreciated, when the cases of

deformation of this part in some women, occasions Prolapsus uteri, which happens so frequently, chiefly on the account of the want of obliquity, by which this organ is lodged in its proper places. This also presents a very important consideration in parturition, as the Linea pectinea, or the os pubis is the first hard obstacle which obstructs the passage of the foetus. At it is there, that the direction of its passage is changed, and by another manner of movement, delivery is accomplished. It is plain to see, that were it not for alterations in the portion of the foetus, it would be ——

impossible to effect a safe
delivery. Fortunately however by the
head a presenting part resting
upon this, it is made to turn on
a pivot, by the contraction
of the womb giving it the force,
whereby this Movement properly
called rotation, is caused. The
foetus then descends into the low-
er Strait, the course of which
is obliquely forwards, and meets
with no impediment, until it comes
in contact with the external parts,
which it generally passes without
difficulty. The dimentions of the
pelvis are very various, so much
so, that a correct average can
hardly be given; Even the Stan-
dard authors differ widely in

their opinion in regard to this.
Different persons, have different
diameters, and those very frequ-
ently compare with others as laid
down, but this is hardly ever the
case, for circumstances unlooked
for may materially alter the dimen-
sions. It is therefore unimportant
that they should be given here,
as it would be utterly impossible
to arrive at a clear distinction,
in that, which has caused so many
very highly appreciated authors, to
vary so widely. — The pelvis con-
tains the Iliacus Muscles on each
side, the Iliac Artery, the Psoas
Muscles, Crural Nerves, Sacral Nerves,
and Lymphatics. — The rectum
passes along down the middle of

the Sacrum, the bladder in situated just above the Symphysis pubis, and the Uterus above that. all these parts are held in situ, by the fascia, superficial, and deep and by the cellular membranes. these have also a very intimate connection with the process of labour, and frequently offer considerable difficulty in its progress, but all are strongly modified, and overcome by Nature and art. — This constitutes the complication of the subject, for although there are many deviations from the arrangement, pursued by me, I have endeavoured to give a discription of this important region, as best I could, desiring

all from the production of those who treat upon Midwifery in all its bearings, I have not mentioned the many varieties of deformity, which change altogether the important, and most prominent parts, for such would not be compatible with my plan, which is, to treat of the normal pelvis, in its various relations, and to be as brief as the subject will allow. I have therefore concluded the subject, leaving unmentioned as I am aware, some of the most important relations, with which it is connected; believing that a strict, and minute investigation in all its varieties, should

be left to those, whose experience and knowledge, prompt them to write elaborate volumes.

Very respectfully yours &c

Henry H. Walker

University of
Maryland
Feby 14th 1860.

An

Inaugural Dissertation

On

Syphilis.

Submitted to the Examination,

of the

Provost, Regents & Faculty of Physic,

of the

University of Maryland.

for the

Degree of Doctor of Medicine,

by

Samuel Beck;

of

Kent County.

Maryland.

1860.

Syphilis.

Syphilis consist in ulceration of the parts, in inflammation of the neighbouring glands, which are the primary simptoms, spots coming out on the skin, ulceration of the throat, inflammation of the eyes, and inflammation and caries of the bones and joints, which are the secondary simptoms.

It was supposed by Hunter and his followers that syphilis and gonorrhea was identically the same poison but these doctrins are certainly erronious both in its local appearance and in its secondary effects.

Ricord has shown in the most conclusive manner that gonorrhal discharge when inoculated

on the Skin or Mucus Membrane never introduces a Chancre, and on the other hand Chancrous pus can never be made to give rise to a Gonorrhœa, but that each disease propagates itself, and no other.

The two diseases may however co-exist, and those cases in which two men have contracted different diseases from the same woman, may be explained by the fact that, Ricord has pointed out that a woman may be affected by Gonorrhœa and deep seated chancre on the uterus at the same time: so that although supposed to be labouring under one, she might communicate both or only one of the diseases, the true nature of her ailments being found out only by the speculum.

Syphilis is a specific disease arising from sexual intercourse, and transmissible by its own specific pus with a tender surface, by inoculation into the system through medium of the secretions, or by hereditary taint, under certain special conditions.

It presents two distinct orders of simptoms, the local and constitutional, the local or primary occurring only on the part to which the virus is immediately applied, and being transmissible solely by direct contact or inoculation. The constitutional or secondary simptoms depending on the absorption of the poison into the blood, affecting consequently most of the tissues and many of the organs, and being capable of hereditary propagation,

and occasionally of transmission through the secretions.

Primary Syphilis.

Primary or local Syphilis is characterized by the presence of specific sores of special form and appearance, characteristic of the nature of the disease. These may occur on the cutaneous, the Muco cutaneous, and mucous surfaces; most commonly on the latter. The most common seat is on the genitals, and in men they are more frequently found on the inner surface of the prepuce, or the furrow between the prepuce and corona glandis, or the angle by the fraenum. The time at which venereal sores appear is usually said to be from the third to the tenth day after infection,

but Ricord says that syphilitic virus operates progressively from the first moment of its application, and is fully formed by the fifth day.

In females the chancre may occur on the external organs of generation or on the uterus.

I shall take Dr Erichsens Classification of chancres, 1st the simple chancre 2nd the indurated or Huntarian 3rd the phagedaenic and 4th the sloughing chancre.

1st The simple or soft chancre is that form of chancre that is most commonly met with in this country, it consist of one or more small sores very shallow resembling an abrasion, with sharp edges somewhat circular in shape and having a tawny grayish or yellowish surface,

with a narrow red areolar around the edges, sometimes with great heat and itching. This variety is most frequently found on the inner surface of the prepuce; if the ulcer be situated near the fraenum it is almost sure to perforate it. These simple chancres very frequently present different appearances. In some cases these surfaces become covered with large fungus granulations, hence termed fungating sores. It very frequently happens that these chancres are attended with a good deal of general inflamation of the penis, usually in a state of phymosis, with a good deal of purulent secretions between the prepuce and glans.

2nd. V. Hunterian or indurated Chancre, is generally on the glans penis

or on the common integument, it is not so frequently met with as the last described. The great Characteristic of this sort of chancre is that its base is indurated from the verry first, any chancre, but more especially Chanchorus excoriations may become indurated, from over stimulation or from setting up great inflamation, but the Hunterian is indurated from the first and Continues so through-out. This induration of the base is the result of a peculiar plastic effusion. The great peculiarity of the plastic base of the Hunterian chancre is certainly that it serves in some way as a source for the continued production of the virus, and the consequent impregnation of the system with it. Besides the

presence of this induration the Hunterian Chancre may be recognized by its circular shape, and its being elevated above the surrounding parts.

3rd Phagedaenic Chancre. They are extremely rapid in their progress, they are yellow and dotted with red streaks. Their shape irregular. The surrounding margin of skin usually looks puffy and oedematic, showing a low grade of arterial action; but sometimes it is firm and of a red, in general the sore spreads wide but not deep.

4th The sloughing Chancre is a combination of rapidly spreading and distinctive gangrene with the syphilitic poison, it usually affects the prepuce and glands. The parts becoming very much swollen

red and somewhat bravny and the
prepuce being in a state of complete
and permanent phymosis, a dusky
black looking shot soon makes its appearance
on one side of the organ. This rapidly
spreads, giving rise to a large slough,
exposing and implicating the glans to
a great extent accompanied with great
hemorrhage from the dorsal artery. In
other cases it sloughs only on one side
giving a very ludicrous appearance
to the organ.

Urethral chancres are usually
situated just inside of the canal
and may be seen by pressing open
the lips, in the form of a small
slough; some, sometimes they are
more deeply seated so as to be
out of sight. This being the
case, a thick, tenacious, sloughy and

bloody discharge appears in small quantities from the urethra, a little way up the urethra there may be felt by grasping a circumscribed spot, somewhat painful on on pressure. This chancres have been found by Ricord to extend the whole length of the urethra up to the bladder.

Diagnosis. It is usually very easily made, sores occurring after a suspicious connection, the resistance of this sores to heal, under simple treatment, by inoculation, this is a sure test, but should not be resorted to very often, as it might give both the Surgeon and patient a good deal of trouble.

Treatment of Primary Syphilis.

The treatment of chancre is of a local and constitutional character, the local treatment being, either

to destroy the poisonous character of the sore or to modify it. The Constitutional treatment being not only to facilitate this, but to prevent if posible Constitutional infection. The complete distruction of the local virus should always, if posible be effected, according to Record if this can be done before the fifth day there will not be time for the poison to get into the system. But even though this time has been considerably passed before the Surgeon sees the sore it is always well to distroy the ulcerating and poisonous surfaces from which continual absorption must be going on.

This is best done by caustics the Nitrate of silver or the Bi Chloride wash, are both very effectual if the inflamation and pain be severe, Opium wash, or a poultice of boiled Camomile flowers

are good. In the treatment of soft chancres Mercury is generally not good, I prefere with my small experience, Dr Miltenberger's prescription, which is. Potass Iodide ℥ i Syr Ferri Iodide ℥ ß, Syr Sarsaparilla ℥ iiiß S. teaspoonfull 3 times a day, the patient bowels should be kept open by an apperient. In the Huntevian or hard chancre, you may use the caustics as in the other case, but you should never try to distroy the base, as that would require to great an involvement of the parts, mercury in my opinion should always be used, unless the patient be to much dejected and broken down, Mass Hydrarg. grsv 3 times a day, take untill the gums are touched, that may be followed by the Potass Iodide grsv 3 times a day this should

be taken for at least four week.

Phagedaenic chancres, this line of practice is not so clear, as much depends on the character of the sore, and on the condition of the patient's constitution. If there be much inflammation, this should be subdued in the first instance by the imployment of mild local antiphlogistic means, and by the opium wash; in many cases this inflamation is best removed by the application of the concentrated Nitric acid, followed by the Opium wash. This should be applied as often as there is a tendency to spread. In the constitutional treatment of these chancres Mercury is very rarely admissible, the treatment of these must be directed by general medical treatment; rest in bed, mild diet; the administration of salines

and opiates in those cases in which there is much inflamation. In those cases in which the patient is broken down, tonics, such as bark or iron with good food and rest.

In the gangrenous or sloughing chancre, if there be much local inflamitory action and general constitutional disturbance, the patient should be treated on an anti phlogistic plan; be well purged, have salines, and in some cases antimony, kept on a low diet, and have local antiphlogistic treatment. Free incission should be made through the sloughing texture, so as to take down all tension, and if the system be much broken down tonics must be used. Hemorrhage occuring from the dorsal artery, to a great extent, is best arrested by the actual cautery.

Of Bubo.

The syphilitic bubo is essentially

produced by the absorption and deposite of venereal virus, in the substance of the glands, the tissue of which becomes poisoned, so that we may consider with Ricord, that a bubo is properly speaking a chancre of an absorbant-gland, differing only in seat from that which is situated upon the surface of the body. Ricord has observed that the pus of a syphilitic bubo is as readily inoculable as that of an ordinary chancre.

Bubo most usually occur about the second or third week after the first appearance of the chancre, but may happen at an earlier or later period.

The treatment of bubo consist in the first instance of trying to prevent suppuration, and

should this take place to let out the matter by incissions or by caustics and heal up the wound which results.

You should always prevent suppuration if possible, because if it does suppurate a tedious result may be entailed on the patient. It consist chiefly in perfect rest of the part, the application of leaches, and if could led poultices and at the same time free administration of Mercury should be persevered in. If there be not much inflamation a blister or Tincture of Iodine will generally prevent it. If it should suppurate and the sore become indolent touch it every other day with caustics.

Constitutional or Secondary Syphilis.

By constitutional syphilis is ment The infection of the system by the

venereal poison absorbed from a chancre, by which it is preceded in many cases, but not necessarily, a bubo has also been one of the antecedent symptoms. This form of syphilis is commonly called secondary.

Constitutional syphilis is not contagious. This fact has been satisfactorily proved by Hunter and subsequently by Ricord who has shown that the pus from one of these sores will never produce a chancre. It is however, hereditarily transmissible from parent to offspring, and conversely it is communicable to the mother from foetus in utero.

The time at which secondary symptoms usually declares itself, is from six weeks to six months: it may supervene upon the primary, or it may not

show itself for years. When once syphilis has got into the system it is very heard to eradicate it.

When syphilis effects the bones, it is then called tertiary.

The prognoses of syphilis if properly treated, is generally favourable.

Treatment of Constitutional Syphilis.

If the patient is not broken down, Mercury and Potass Iodide in the form I have recommended in the previous pages may be used with good effect, but if he be broken down, a different course must be persued, enjoin rest give tonics, and build up as much as possible.

Ends.

Inaugural Dissertation

on

Respiration;

Submitted to the examination

of the

Board of Regents & Faculty of Physic

of the

University of Maryland,

for the

Degree

of

Doctor of Medicine;

by

Charles Wesley Johnson.

To the Members of the Faculty of Physic
of the University of Maryland:

To you am I
indebted for nearly all that I know of
the Science of Medicine; and ever will my
memory turn to you with most grateful
feelings for useful instructions and your
kind & sagacious efforts to thoroughly prepare
me to practice the Profession of Medicine.
In this my Thesis, which I dedicate to
you, I hope you will expect but little
that is original or new, as my opportuni-
ties have been limited: but I trust,
that no matter what may be the char-
acter of the Thesis, the Practice
may be such as shall bring no
discredit on either you or myself.

Respiration.

The function of Respiration essentially consists in an interchange of oxygen and carbonic acid, between the blood of the Animal and the surrounding medium; carbonic acid being given out by the blood and oxygen entering in its stead.

Hence the first object of the Respiratory process which is common to all forms of organized beings, is to eliminate from the body the carbonic acid, which is one of the products of the continual decomposition of its tissues.

But another source of carbonic acid to be set free by the Respiratory process, and one which is peculiar to Animals, consists in the rapid changes which take place in the Muscular and Nervous tissues, during the period of their activity.

Besides these sources of Carbonic acid which are common to all Animals, there is another ~~kind~~ which appears to be peculiar to the two highest classes of Animals, Birds and Mammals. These are capable of maintaining a constantely elevated Temperature, so long as they are supplied with a proper amount of appropriate food; and their power of doing so appears to depend upon the direct combination of certain elements of the food, with the oxygen of the air, by a process analogous to combustion.

We see that the sources of Carbonic acid in the Animal body are threefold.—1. The continued decay of the tissues; which is common to all organized bodies; which is diminished by cold and dryness, and increased by warmth and moisture; which takes place with increased rapidity at the approach of death, when this affects the body at large, or only an individual part; and which goes on unchecked when the actions of nutrition have ceased altogether.—2. The metamorphosis which is peculiar to the Nervous and Muscular tissues; which is the very condition of their activity;

and which therefore bears a direct ~~conversion~~ relation to the degree in which they are exerted — 3. The direct conversion of carbonic ~~acid~~ of the food into carbonic acid; which is peculiar to warm-blooded animals; and which seems to vary in quantity in accordance with the amount of heat to be generated.

The great and important function of Respiration is to extricate or eliminate the carbonic acid from the blood; though it is true that oxygen serves other important purposes in the animal economy. But of these in this article I shall have nothing to say.

The elimination of the carbonic acid from the animal body, which is generated in the various ways that I have enumerated takes place in the lungs. between the oxygen of the air and the circulating fluid or blood. I will for a moment refer to the mode in which the blood is sent to this organ, that we may the more clearly understand the subject.

It will be recollected that the left side of the heart sends the blood into the general

syst. ; this is called the systematic circulation.
The right side of the heart sends it into the lungs, and this has received the name of the pulmonic circulation. But if the blood, that goes to the lungs were returned in the same state, death would be the inevitable consequence. For we have learned that venous blood acts as a poison to the Nervous and Muscular systems; and this is the reason why an animal dies when the air is prevented from passing through his trachea to the lungs. Bichat showed this very decisively. He connected, by a tube the jugular vein of one dog with the common carotid artery of another and allowed the venous blood to flow into it. The immediate effect of this was that the dog in whose brain the venous blood was made to flow or circulate, became completely insensible, and would ~~be~~ in a short time have died. On allowing the arterial blood however again to circulate to his brain the dog was quickly restored.
What are the changes that take place in the lungs. and how are these changes

effected. These questions will be best answered by first knowing what the lungs are.

The lungs are principally composed 1st. the Bronchi of which the bifurcation of the Trachea forms the first, and which divides and subdivides until they terminate as has been supposed in very minute bags or air cells. which vary from about 1-200th to the 1-70th of an inch. Their shape is irregular, and their walls are, for the most part flattened against each other. Each of the ultimate ramifications of the bronchial tubes, communicates with a cluster of these air-cells grouped around it; those which are in immediate proximity with the tube, open into it by well defined circular apertures, and others communicate with it by opening into these and into each other. Each air-cell is lined by an extention of the mucous membrane from the bronchial tubes but this does not seem to be furnished with an epithelial covering. Between the adjacent air cells, is a network of fibrous tissue

that forms the connecting medium by which they are held together; this tissue appears to be of the elastic kind. The pulmonary arteries subdivide into branches whose ultimate ramifications form an extremely minute capillary plexus; and this is disposed between the walls of the adjacent air-cells, so that each portion of this plexus comes into relation with the air. Through the lining membrane of the contiguous air-cells on both sides:- an arrangement which is obviously the most favourable that can be to the aeration of the contained blood.

If we tie up tightly in a bladder a quantity of venous blood, we will find, in a short time, that exposure to the air has changed the colour of the portion near the surface. ~~Exactly the same~~ The air has passed through the bladder, and has converted the venous blood into arterial blood. Exactly the same thing takes place in the lungs; for the air in the air-cells is separated from the blood in its vessels by a membrane not more than the thousandth

part of an inch in thickness, and it is through this membrane that the change in the blood is effected. But we shall find that it is not the blood alone that is altered in its quality. The air undergoes a chemical change. The blood in the lungs becomes fit for supporting life. The air becomes unfit for this purpose. We must therefore describe—1. The means by which the air is brought into and removed from the lungs and—2. the changes of composition that there occur in the air and in the blood.

Here I might mention that the Respiratory movements, like other reflex actions depend upon a stimulus of some kind originating at the extremities of the nerves, propagated toward the centre by the afferent trunks, and giving rise to a motor impulse, which is transmitted along efferent or motor nerves to the muscles, and which occasions their contraction. We find that the stimulus for the excitement of the movements may be transmitted through several channels. Its chief source, no doubt is in

the lungs and arises from the the presence of venous blood in the capillaries and of carbonic acid in the air-cells.

Under ordinary circumstances – that is when the blood is being duly aerated, and the air being properly renewed – the impression thus made upon the nerves of the lungs is so faint, that we cannot perceive it, even when we specially direct our attention to it. But if we suspend the movements for a moment or two, we immediately experience a sensable uneasiness. The Pneumogastric is obviously the channel through which this impression is conveyed to the nervous centres:

But of the spinal cord be devided between the point at which it gives origin receives the 5th & 8th pairs of nerves, and and that at which it gives origin to the phrenic, the movements of the diaphragm immediately cease; and this is the reason that death is so instantaneous in cases of luxation or fracture of the high cervical vertebrae, causing pressure upon the spinal cord just [illegible] to exit from the cranium; while if the injury takes place below the

origin of the phrenic nerve life may be pro-
longed for some time. The sensory nerves
of the general surface and more particularly
the sensory portion of the fifth pair. which
supplies the face, are most important aux-
iliaries as excitor nerves; the inspiratory
movements being peculiarly and forcibly
excited by impressions made upon them
especially by the contact of cold air or water
with the face.

These different nervous forces all operate
either directly or indirectly upon the lungs.
The lungs are contained in the chest or thor-
ax a conical cavity formed by the Sternum
anteriorly the vertebrae posteriorly and the ribs
above and laterally. It is separated infirmly
from the abdomen by a fibro-serous mem-
brane called the diaphragm which is fixed
to the inferior portion of the Sternum and
short ribs anteriorly, and extends down-
wards and backwards to be attached to the
vertebrae anteriorly posteriorly.
Through this membrane the oesophagus

blood vessels and &c. &c. The whole inside of the throat is lined by a thin smoothe membrane called the pleura; which devides the chest into a right and left side and which likewise covers the lungs, but these are never thelys; one the outside of the pleura in the same way as a head is on the outside of a double night cap. There is no opening to admit the air between the lungs and the sides of the chest, but it gets easily by the Trachea, into the airtubes and celes of the lungs.

From these explanations it will be easy to understand the mechanism of respiration.

Drawing in a breath is called inspiration. We do this—1. by raising the ribs, which are provided with numerous muscles for this purpose—2. and at the same time by ~~doing~~ depreping the diaphragm. Of the latter movement we become sensable by placing the hand on the abdomen during inspiration. when we notice the ribs raised, and find the belly pushed outward at the same time by the descent of the diaphragm.

It is therefore evident that the cavity of the chest must be considerably enlarged by inspiration. But the cavity of the chest cannot be enlarged without something following it up. And as no air can get between the lungs and the sides of the chest, if the trachea remains open the air necessarily rushes by it into the air-tubes and cells of the lungs, and blow them up as we might blow up a bladder. The muscles that act during inspiration have become relaxed. The expulsion of the air from the lungs is effected principally by the elasticity of the ribs, and by the contraction of the muscles of the belly pushing up the diaphragm. This is called expiration

It must be manifest from considering these arrangements, that the amount of blood and air brought together in the lungs must be very great. The whole extent of the air-tubes and cells in man taken collectively, has been calculated by Hales at about 20,000 square inches, and by Monro at twenty

lines the surface of the human body; the branches of the pulmonary artery, which ramify upon this surface are so twisted and interlaced that they have received the name of the wonderful network; while the air passing into and expelled from the lungs, and consequently brought into contact with its vesicles and blood vessels, cannot be less in an ordinary man, than between 3,000 and 4,000 gallons daily

Fresh supplies of air thence, that the blood may be purified is the essential object of a respiratory apparatus; and from the necessity of having some modification of such an apparatus, no animal whatever is exempted, although the supply of air ~~varies~~ required varies much. A frog or lizard, for example, will live for a long period in air which a bird has been forced to breathe till it has died; and insects will live for a considerable time even in the air that has ceased to support both the bird and the lizard.

Fishes again whose gills perform the

same office as our lungs, can exist upon the small portion of air they extract from the water in which they swim. But, however small the quantity required, none can want it altogether; and if any of them be placed under the receiver of an air-pump, and the air be exhausted, they immediately become distressed, and die in a short time.

There is one remarkable circumstance that may be noted, when the motions of the heart or intestines, and those of respiration are contrasted. The motions of the former are entirely removed from the influence of the will, and usually do not excite in us any consciousness of their existence; while those of respiration are always accompanied by a sensation, if not also by an act of volition. Before air is drawn into the chest, we have always a peculiar sensation reminding us that a fresh supply of this material is required. At first this sensation is merely a gentle intimation; but if neglected it becomes so

intolerably painful as to compel us to relieve it by breathing.

When an individual becomes partly insensable, the sensation requires to be considerable before he attends to it; and accordingly we find, that instead of breathing as we ordinarily do fifteen or twenty times in a minute, he will breathe only once in half a minute a minute or a minute and a half. When insensability increases still farther, this and all other feelings become extinct, and then he dies. Upon this principal an explination has been given of sighing.

When a person sighs, the mind has been intensely-fixed on some object. The consequence is Dr. Darwin supposes, that he forgets for a short time to breathe, until the sensation in the chest becomes so importunate as to oblige him to make a more than usual full inspiration to relieve it.

The mechanism of respiration is considerably modified in other classes. Whales (which breathe air) have ports that are thought to

serve as reservoirs, both of venous and arterial blood; and this is conjectured to be the reason why they are able usually to remain under water twenty minutes, and sometimes upwards of an hour, without breathing. The lungs of birds instead of being free in the chest, are fixed to its sides, and also have openings in them, which allow the air to pass into air-cells that pervade almost every part of their bodies. As a proof of this, if the trachea of an eagle be tied, and the largest bone of his wing be broken, he can breathe through the broken bone instead of the trachea. It is this arrangement that causes the respiration of birds to be called double, for the air acts on the blood - 1. in passing through the lungs to the air-cells - 2. in passing out of these, and probably also while it remains in the air cells. Hence they consume more air than any other class of animals.

Reptiles can act but imperfectly on the air, from the cells of their lungs being very large, and, from this cause of course diminishing

the surface upon which the blood vessels have to be distributed. The frog has no ribs nor has it any diaphragm; the abdomen and chest forming but one cavity. As a substitute for these the air is forced into the lungs by a species of deglutation. A frog perishes if his mouth is kept open, because before this deglutation can be accomplished, the mouth must be closed.

The surface occupied by the gills of fishes is often very considerable. Those of the skate are said to have a surface nearly equal to that of the human body. The reason why air cannot usually be directly breathed by gills, is believed to be principally because they become collapsed and dry. The eel, the crab, and some other species, that breathe by gills, can, however, breathe in air for a considerable time.

The only other modification of the respiratory apparatus I shall refer to is that of insects. The varied appearance of the wings of the butterfly is produced by

what are called trachea. that have openings in them or on the surface. (stigmata) for admitting the air and extensive ramifications over the body. There are similar openings on the sides of the ber-worm and in other species. If these are closed. the animal immediately dies. In all the lowest classes of animals. and even as high as the class of reptiles. the skin is also an active respiratory organ.

What has been said may render intelligable the mechanism by which the air is introduced into the body. It will now be necessary to discribe the changes that take place there. The atmospheric air when it goes into the lungs. is composed of about four parts of Nitrogen gas. and one part of Oxygen gas. Besides these there are some other properties called accidental constituents. Carbonic acid gas and Hydrogen gas in the proportion of one part in a thousand. and an indefinate proportion of water vapor never exceeding three percent.

But the air which comes out from the lungs, is not the same in composition, for a considerable quantity of oxygen is found to have disappeared, and in its stead we have another gas formed, called carbonic acid gas, which is produced by the union of a portion of oxygen with the carbon, which forms a large ingredient in the composition of the blood and of the body in general.

Carbonic acid is a gas which is fatal to animal life, and it is therefore discharged from the lungs. If any animal is made to inhale it insensibility and death follows in a very short time. We have already seen that the venous blood is a poison to the animal body, and it is probable this same carbonic acid makes it noxious. It appears that about 45,000 cubic inches of oxygen are consumed by an ordinary man in twenty-four hours, and that 40,000 inches of this gas go to form the carbonic acid produced during the same period, the re-

mainder of the oxygen probably combining with other ingredients of the ~~body~~ blood.

Under different circumstances, however, the consumption of oxygen varies. It is considerably greater when the temperature is low than when it is high, and during digestion the consumption has been found one half greater than when the stomach is empty.

When we thus see the great quantity of pure atmospheric air, which a single individual requires to carry off the noxious parts of the venous blood, and to convert this into arterial blood, we can easily comprehend why such dreadful consequences should follow the breathing of a highly vitiated atmosphere. The most melancholy instance of this kind on record, is the well-known one that occurred in the Black Hole at Calcutta. In this dungeon, 18 feet square, and having only two small windows on the same side to admit air, 146 men were crammed. In

six hours 7 of them had died from suffocation, after the most horrible suffering, and in the morning, when the doors were opened, only 23 out of the whole number remained alive.

From the same cause we can understand how hurtful it must be continually to breathe the air of ill ventilated rooms, confined sleeping apartments, crowded low roofed schools, or other places in which numbers are assembled together, and where ventilation is not attended to. A long continued and constant residance in such places must certainly shorten life several years, and not unfrequently terminate it rapidly, by giving rise to consumption and other fatal diseases.

It must not, however, be supposed, from what has been said, that the carbonic acid given off from the lungs, is to be viewed as merely noxious material. If it were retained, death would undoubtedly take place.

But if no carbonic acid were formed, we

shall find that the heat of our bodies could not be maintained. When charcoal is burned in atmospheric air, the changes which occur seem to be almost precisely similar to those that are produced by respiration. Oxygen disappears, and carbonic acid is formed. It seems reasonable, therefore, to conclude, that the heat produced in both cases is connected with these changes. That the production of animal heat bears some resemblance to combustion, is rendered probable by the following considerations—1. It has been determined by experiment that the charcoal contained in the carbonic acid formed during a given period by respiration, would give out, when burned fully more than half the heat produced by the animal in that period. It takes no less than about eleven ounces of carbon to form the carbonic acid of an ordinary man's respiration in twenty-four hours. Dr. Milne Edwards thinks that this, and the ~~superabundant~~ oxygen which is absorbed by the blood,

(which probably combines in great part with hydrogen to form water) will account for nine tenths of the heat an animal produces. the remaining tenth probably being the product of the friction of the different parts of the body, the change occurring in secretion. &c — 2. This view is supported by the fact that the temperature in different classes of animals, very accurately correspond to the quantity of oxygen consumed.

The temperature of birds is highest and they consume most. The young, among the Mammalia, consume the least and have the temperature the lowest.

Indeed it may be remarked, that the of most of the Mammalia, including children, have much difficulty in supporting any great degree of cold when seperated from their parents, and where ~~incidem~~ incautious exposure takes place, the mortality among them is found to be very great.

Reptiles which consume little oxygen, have a temperature only a few degrees above the medium in which they live, and the same may be said of fishes, with the remarkable exception of the Cetacea whale porpoise &c. which have a high temperature but consume much oxygen, as they breathe the air by lungs.

It has been thought, however, that as carbonic acid is given off in respiration, and the oxygen disappears at the same time, the temperature of the lungs ought to be much higher than that of other parts. And it was to meet this difficulty that Dr Crawford proposed his celebrated Theory of Animal Heat. He maintained that the capacity for heat is greater in arterial than in venous blood. That as the enlargement of capacity takes place in the lungs at the same moment as the heat is generated, a considerable portion of it must be absorbed; and that thus latent heat comes to be given

out; as the arterial in its course
is gradualy converted into venous blood.

It will be observed, that Dr
Crawford's theory, supposes - 1. that the
capacality for heat in arterial is greater
than in venous blood; which subsequent-
Observations have not shown to be
the case. Dr Davy states the capacity
of both to be very nearly the same. 2.
He supposes that the carbonic acid given
off during respiration is formed in the
lungs, from the direct combination of
the oxygen of the atmosphere with the
carbon of the blood, which also appears
to be incorrect, for it has been shown by Dr
Edwards and others, that carbonic acid is
formed in large quantities, even when
an animal is made to breathe gas con-
taining no oxygen. A frog can be made
to breathe nitrogen or hydrogen gas even
for several hours together, without loosing
its vitality; And in such cases, it is found
that nearly as much carbonic acid is

formed, as when the animal is allowed, to breathe atmospheric-air

It therefore seems probable that the carbonic acid is formed in the blood, and is merely given off or separated at the lungs

There is another theory that has been ~~suppo-sed~~ proposed by a German physiologist, and which is supported by the fact ascertained by Professor Magnus, that venous and arterial blood both contain carbonic acid and oxygen, but the carbonic acid is in larger, and the oxygen in less quantity in the venous blood than in the arterial blood, which seems to avoid the difficulties involved in Dr Crawford's theory.

This physiologist supposes the oxygen, when it is absorbed by the blood in the lungs, exists there ~~there~~ only in a loose state of combination; as it circulates; the union with the carbon, &c of the blood is supposed to become more intimate.

The carbonic acid being thus formed probably in the capillaries, and the heat comes

thus also to be gradually disengaged. and diffused through every part of the body Professor Mulder calculates that the quantity of carbonic acid, which has been ascertained to exist in each cubic inch of venous blood, is sufficient to account for the whole quantity exhaled from the lungs. Professor Liebig a high authority, takes nearly the same view of this subject.

Many other facts, however, prove that both respiration and the nervous system are connected, directly or indirectly, with the production of animal heat. We can only state generally, also, that the body possesses the power of keeping down its ~~heat~~ heat to nearly the natural standard, even when exposed to a very high temperature Sir Charles Blagden remained, without any very great inconvenience in a room, the temperature of which was 5'2° above that of boiling water in which eggs were soft hard.

Indeed the heat of the body,

though the temperature of the atmosphere was 264° was only three or four degrees above 98° its natural standard. It has been found that the principal agent in lessening down the temperature, is the immense evaporation that takes place from the lungs and skin. Accordingly when the skin is varnished, or the air of the apartment is saturated with moisture, so as to prevent evaporation, a temperature one half so high can hardly be borne.

Having now given a short but a connected account of the physiology of respiration, I cannot but remark how varied and how complicated are the agents employed. And yet how accurately each of these performs the part assigned to it. Such investigations as these with which I have been occupied, form the proper foundations of natural religion. Never did any piece of machinery invented by man indicate with greater perfection the intentions of its maker

An

Inaugural Dissertation

on

Extremes of Temperature,

a cause of disease;

Submitted to the examination

of the

Provost, Regents & Faculty of Physic

of the

University of Maryland,

for the

Degree of Doctor of Medicine.

by

J. E. Brodwater.

Extremes of Temperature a cause of Disease.

That which has made man preeminent in animated nature, and which has so widely distinguished him from the brute creation, has given to him, alone, the power of penetrating, alike, the ice-bound shores of the North and the burning sands of the African desert. Nor has it enabled him only to withstand the effects arising from the abstraction or superabundance of Solar heat, but experiment and the same intellect has taught him that he can with impunity,

enter the fiery oven of 360°.
Deprived of the protection which
his understanding has fur-
nished him, man no lon-
ger possesses this superiority
over the animals around him,
but becomes even far less ca-
pable of enduring these ex-
tremes of heat and cold.
Nature has not only given
to animals, generally, far a
better protection against the
injuries resulting from
exposure to the extremes of
temperature, but has also
endowed some with the priv-
ilege of allowing their own

temperature to be regulated
& that of the surrounding me-
dium, without harm to them-
selves. Not so with man; to
him has been given a cer-
tain amount of heat, the
maintenance of which is
necessary to his continued ex-
istence, and the power of
either increasing or dimin-
ishing, in any great degree,
this allotted portion, without
detriment to his own body, has
has been totally denied.
When man transgresses this
law of nature, he subjects
himself to a cause, from

which there is more more
prolific of human mal-
ady. Of how great impor-
tance, and of what intense
interest, then, should be
the study of this law to
him who is either en-
gaged or likely to be en-
gaged in a physicians mis-
sion. Instead of speaking
of all the diseases which
arise from heat and cold
promiscuously, we will
give the general effects when
applied locally separately,
and the morbid phenom-
ena which may follow

snobs application. Physiologists have placed the avarage temperature of the human body in health, at 98° F, but this is liable to variations according age, exercise, sleep &c. Thus while the avarage temperature of adult is 98° F., that of the infant is 102 F. We also find, in testing the degree of heat by the thermometer, that as we recede from the center of the system, the mercury falls in the tube. While the temperature of the body is placed at 98° F, we feel most comfortable in

an atmosphere varying from 60° to 62° F., and it is to the increase of this temperature that the terms warmth and heat have been applied, and to the decrease that of coldness and cold. This law is also subject to its variations (as far as the sensations are concerned) under different circumstances. Thus a case is related by Capt. Parry in which he states that the rise in the thermometer from 18° below zero to 28° was attended by a disagreeable warmth of the surrounding atmosphere, and another

case is related by Dr. Walshe where the fall from 72° to 61° was attended by painful sensations of cold. As the general effects of a slight increase in the normal temperature we have a flushed surface, increase in the force and frequency of the pulse, an augmentation of the organic actions, and more than ordinary nervous energy; in short the whole system is under a healthy excitement. If this degree be slightly elevated, we shall have profuse perspiration, (which tends to relieve

the body from its excess of moisture) an abundant secretion from the liver, kidneys and mucous membrans, thereby preserving internal fever and inflammation: at the same time we have loss of nervous energy, no animation, and languor. If the temperature be still increased, instead of the abundant secretions we shall have scarcely any, in consequence of the over excitement of the secreting organs, from this may follow internal congestion, a febrile condition and inflammation

with their attendants of nervous disorder, anorexia, emaciation and finally death itself. Hence the general law: the functions are increased in a normal direction by a moderate excitement, by a greater excitement they are deranged, and by a still greater are diminished or suppressed. Such are the effects when the whole system is subjected to a higher temperature, but heat may affect the body locally also, as in the ~~coup de Soleil~~, ~~the prick~~ by heat, burns &c.

The first of these diseases is brought about by the direct influence of the sun's rays upon one who is partially worn out by labor and fatigue. Concerning the real nature of the disease pathologists are not yet agreed; some regarding it as a species of apoplexy while others contend it is not, from the fact that the same remedies are not applicable in the majority of cases. Prickly heat is common to new residents in tropical climates. "By a certain degree heat loses its vital in its chemical agency, and produces the death of the part

on which it acts by coagulating the albumen and causing a decomposition through the new play of affinities. This is seen in the direct application of flames, heated solids or liquids, forming burns or scalds. The danger from these is in proportion to the extent of surface which they involve, as well as the depth to which they extend. An extensive superficial burn is much more dangerous than a complete destruction of a small part of the body. Burns have a much more serious effect upon children and nervous females than upon

old persons and adults. The brain is sometimes affected from sympathy and we have stupor as the result. Burns have been divided, according to their lesions, by Dupuytren into

1 Inflammation, with or without peeling off of the cuticle

2 Vesication with supuration,

3 Destruction of the superficial part of cutis,

4 Disorganization of skin as far as the subcutaneous cellular tissue.

5 Conversion of the of the skin, cellular membrane and a part of the muscles beneath into an eschar.

6 Complete carbonization of the burnt part. These are all ~~all~~ ~~followed~~ attended

with peculiar phenomena, and followed by particular results too numerous to be mentioned in this place. Death from burns may take place from intensity of the pain, nervous shock, inflammation, suppuration, gangrene, irritation, fever or exhaustion. Such are some of the general and local effects of Heat alone.

Particular results are also brought about when Cold alone is applied to the human system. When the body is exposed to a temperature a little below that of a temperate degree, we find the mind more active, the nerves

system more energetic, the muscles more ready to execute the commands of the will, and the whole system more or less under a tonic influence, provide the cold be not too long continued, If the cold be more severe and continued, and particularly if the calorific function be not maintained by warmth of clothing and exercise, there will be general pallor + corrugation of the skin, stiffening of the muscles, mental inaction, great proneness to sleep, with a staggering movement of the body as if the person was laboring under intoxication

and if the cause be not removed
cessation of the vital functions
with a closing of the scene by
death. From a moderate degree
of cold a person may recover,
but even then he is liable
to pass[illegible] from the febrile,
and inflamatory condition
which may or generally does
follow. This is best prevented
by a gradual restoration from
the freezing state to that of
comfortable warmth. The
means by which cold is brought in
contact with the body has
a great influence in its effects
A man may expose himself to

an intense degree of cold, (without great discomfort) provided the atmosphere be in a quiescent state, but if there be a strong current of air at the same time and she will find it intolerable. Again a person may enjoy a temperature, when communicated by dry atmospheric air, that would be disagreeable and even injurious if communicated by water & a hand & well conducting substances. But above all, perhaps, there is no way in which cold can so easily be communicated to the system that will prove more depressing & injurious, than

when it is imparted through moisture accompanied by a strong current of air. This is fully illustrated by the bad effects which follow exposure to storms associated with rain and sleet. In this case the greater intensity of the cold is owing to the rapid evaporation of mass which is often used to produce cold. As a cause of disease an eminent writer says that there is scarcely any form of internal inflammation, not of a specific character, which may not have its origin in this cause,

and the same may be said of
irritations of all grades, with
congestion, increased secretion
or haemorrhage. Peculiar dia-
thesis are by this means devel-
oped with their specific dis-
eases. Suppression of perspi-
ration is an other morbid
agent of cold, by causing internal congestion & inflammation
temperature is also instrumental
in the development of scorbutic
and asthenic forms of disease,
as well as phthisis or scrofula,
and in the latter it is even
supposed to form the predis-
position itself. Among the
circumstances which accelerate

death from cold, may be enumerated, nervous exhaustion, as in the aged and infirm, those who are worn out by disease and fatigue and last but not least habits of intoxication. Sleep by its relaxing influence also promotes the morbid effects of cold, Infants are much more liable to be injuriously affected than adults.

Among the preservatives from its injuries may be named mental preoccupation, habit, &c. &c. Locally applied it may produce freezing of the part which may result in death

of the same from inflammatory reaction, or may result in somatic death from sympathy of the part affected. The sympathetic morbid effects may also be seen from those produced by taking large draughts of cold water into the stomach. Among all the causes of disease, perhaps, there are none of the associates in its production, than are heat & cold. We see this in all forms of fevers, whether endemic, epidemic or contagious, the majority being ushered in by a chill, followed by a fever. In cases of partial freezing we have the two associated.

In these cases the heat and cold may rather be considered an effect instead of a cause, for as soon as they are removed the disease generally ceases. The same thing is also exemplified in both slow and sudden transitions of temperature. By a long continued superabundance of heat, the stomach, liver, and intestines are unduly excited, and consequently a large quantity of blood is drawn to them, producing congestion, which may be followed by a lethargic state of the organs, which only requires a superventian of cold

to bring about inflammation and disease. In this case the heat is the predisposing and the cold is the exciting cause. In regard to the sudden transitions of temperature, we have numerous daily examples in Coryza, Laryngitis, Bronchitis, Pneumonia &c, in fact the diseases which may follow are almost innumerable. In nearly all the cases the cold is followed by a febrile condition, occasioned by the reaction, and this goes on to inflammation, & intimately associated with the effects of heat and cold on health are the seasons.

We find that particular diseases are peculiar to particular seasons; Thus we have diseases of the respiratory system in Winter and disease of the abdominal organs in Summer. Winter seems particularly detrimental to old age, while a large number of children are carried off by the Summer maladies. Dr. Ward accounts for phthisis, and other thoracic diseases which are peculiar to northern climates, and the hepatic and other abdominal visceral diseases in the following manner; a certain excess of carbon is introduced with the food which is partly eliminated by the lungs and skin in the

form of carbonic acid, forming animal heat, and part of the liver in the form of fatty matter. As this heat, which is produced by the formation of carbonic acid, is not needed in warm climates, the liver is overburdened with the duty of liberation of carbonic acid and hence the irritation and subsequent inflammation and disease. In cold climates the reverse is the case; the lungs are unduly exercised and hence their diseases. In temperate climates, inflamations as catarrhs and Rheumatism, are most prevalent in consequence of the frequent vicissitudes of weather and therefore varying conditions of the organs

An

Inaugural Dissertation,

on

Abortion,

Submitted to the Examination

of the

Provost, Regents, & Faculty of Physic,

of the

University of Maryland,

for the

Degree of Doctor of Medicine,

by

Daniel Scott Boyle,

Gentlemen,

I present to you this treatise upon the subject of Abortion, its causes symptoms treatment &c for several reasons the most important of which is that I may thereby become more familiar with and more indelibly impress upon my mind all that is known upon this very important subject. I do not know a branch of the Profession that is of more importance to a Practitioner of Medicine, or the ignorance of, which may be more fatal to those entrusted to his care, and to his success.

in practice. Entertaining the views I do upon this subject I should be guilty of a dereliction of duty, and imposing upon myself a degree of responsibility which I could very ill bear if I did not make myself as well acquainted with it as possible. It is unless Gentlemen for me to state that I have drawn largely from the works and have in the main adopted the ideas entertained by the latest writers upon Obstetrics. What else could I do? All the knowledge I have acquired has been from the Prof.ssor of Obstetrics and the works recommended by you Gentlemen, And if I entertained any views or opinions

differing from those capable and qualified to teach and write upon this subject it would be presumption in me to give description to them in this place. By the term Abortion we mean the birth of a foetus in a non viable state, some writers make different varieties of it as it occurs at one or another time, thus Guillemeau calls it Ovular if previous to the Four-teenth day Embryonic if before the third Month, and Foetal from that time to the full term. Before entering fully upon the subject it will be well to give it that description which it inherits from the works, namely the causes producing, the symptoms, and

causes which may arise, the signs
by which it may be detected and the
means of opposing or preventing its
occurance. – The causes may be divi-
ded primarily into the predisposing
and exciting – the most common
predisposing cause is syphilis in
either the Maternal or Paternal system
– this poison enters the System so insid-
iously and displays itself so mysteriously
that most of the cases of Abortion not
traceable to any direct or known cause
may be attributed to its influence.
Professor Mittenberger relates a most
singular case occuring within his
own knowledge that is strong corrob-
orative evidence of the foregoing statement

An attack of continued or Exanthem-
atous fever in connection with a ner-
vous irritable temperament may act
as a predisposing cause, or it may follow
the convulsions to which pregnant
women are subject. The various
nervous diseases, Epilepsy, Chorea and
Hysteria may cause the death of the
foetus, and it acting as any other foreign
body in the Uterus may induce contraction
and cause its expulsion. Most of the
Epidemic, Sporadic and Chronic
diseases to which the Maternal system
is subject may be and frequently are
the causes of Abortion. Among the
eruptive diseases Variaoloid in pregnancy
is one of the most fatal to the pregnant

woman, causing this accident in a greater or less number of cases, as it is severe or mild in its attack – the malegniant form sparing but few, scarcely less fatal and equally to be dreaded is the common affection Pneumonia which is not only to be feared in relation to the danger to the child but also that of the mother. — Measels is also regarded as a very serious complication, and the other Exanthematous disease Scarlitina is less dangerous than the preceding varieties in consequence of its being fatal only in the Malignant form. Females who marry either to old or young and in whom there is generally great rigidity of the

Uterus very frequently Abort and this
generally occurs at a later period each
time until the Uterus attains its normal
placidity and consistance
We have been considering those causes
in which the maternal System sympa-
thized as a whole, in other words those of
a constitutional Nature, and as the
various affections and diseases heretofore
enumerated only pre-dispose the System
to its occurance and as it frequently
occurs in consequence of such predispo-
tion, I think that they can properly be
termed both the predisposing and exciting
Causes, but as there are others which
are more strictly exciting Causes I will
proceed to their Consideration

The Uterus frequently is the seat of tumors and growths which so impede the developement of the foetus as to cause its destruction, Ulceration of the neck with, prolapsus - Antiversion - retroversion and lateral obliquity in consequence of the shortness of one or other round ligament - labor exposure, violent fits of Anger, the too frequent indulgence of sexual intercourse or violence inflicted upon the Maternal System, these and many others might be enumerated as the direct and exciting causes in the production of this accident. The foetus in Utero is subject to many of the diseases to which it is so liable in extra Uterine life, Hydrocephalus, Tuberculosis, Exanthema, Worms &c

and if attacked by any of these diseases will most likely perish, and then acting as any other foreign body will cause contractions of the Uterus and its expulsion,

Symptoms

The symptoms vary with the time of their occurance, and the cause produ"cing them, if the abortion takes place during the earlier part of Gestation it is marked by symptoms so mild in their character as scarcely to require Medical aid - indeed women not unfrequently abort thinking it noth"ing more than a painful or protracted menstruation. At a more advanced stage they are better marked and

more violent in their character, never
"theless varying with the cause - if it
is induced by any injury, violence, or
over exertion the woman may experience
a sharp pain or two followed by a gush
of blood and the expulsion of the foetus,
when this accident has been induced
by the influence of bad health in the
mother or any of the many forms of
chronic disease or from those causes
that act slowly the following are the
most common - shivering succeeded
by heat, nausea, thirst lassitude, pallor
cold extremities sadness & depressed
spirits a sense of sinking or weight
in the Epigastrium, tenesmus with
frequent desire to pass the water, when

these symptoms last for a longer or shorter
time, the pains increase and assume
the character of uterine contractions
and if a vaginal examination be
then made and the os uteri is found
spongy soft, flacid, yielding and
partially dilated, or the membranes
protrude or can be felt with the finger
it is pretty positive proof that Abortion
is about to take place, and as our attempts
to prevent it may be likely fail, it may
be good treatment to hasten the delivery
by the administration of Ergot,
If the cause has acted directly upon
the foetus as causing its death the woman
may feel some pain and have considerable
anxiety as to her condition, which may

soon be relieved by perfect calmness
of all the disagreable sensations
and she congratulates herself upon
the riddance of her hitherto unpleas-
ant condition, — the swelling of the
breasts, with the pricking sensations
in them gradually subsides or ceases
altogether and then an Abortion is
inevitable, and its expulsion may
take place at any time from the
eighth day to several weeks or even
months in these cases there is generally
less danger from hemorrhage than
in those which occur under different
circumstances

Diagnosis

The Diagnosis is very difficult because it is complicated with the fact that prior to the fourth month it is almost impossible to know with any degree of certainty whether or not the woman is pregnant. This is particularly true of women who have previously born children for we have not then the signs to assist us in our Diagnosis which are so valuable in primapara. It is not an uncommon thing for women in good health who have been subjected to the exciting cause of pregnancy to have some of the symptoms of that state with suppression of the menses for several months and then the occurance of pains which are soon

followed by a discharge of blood from the vagina, differing in no respect from the Catamenial flow, the can say that there are the premonitory symptoms of Abortion or the return of suppressed menses from some unknown cause? Madame Lachapelle says that in Abortion the Uterine orifice is open, the hemorrhage precedes the pains and the latter persist notwithstanding the abundance of the discharge, whilst in difficult menstruation the orifice is closed the pains are few before the hemorrhage appears and that they diminish or cease entirely when the discharge is once established There is a condition of the Uterus mentioned by Cazeaux as a sure indication

of an approaching Abortion, which is that after the pains have lasted for sometime the internal Orifice of the neck has become enlarged while the inner surface of the Uterus forms a pear shape the larger of which represents the fundis and the smaller the neck of that Organ. At a later period the diagnosis is less difficult— the Abdomen diminishes in size, — the movements of the foetus are not perceptible, and if after four and a half months the sounds of the foetal heart are not heard, it must be dead and the Abortion will follow sooner or later.

Treatment

The treatment will vary with the par-
ticular case that may fall under our
observation, if we are called to a patient
who is laboring under the usual signs
of Abortion and find after a vaginal
examination that the Os Uteri, is soft
doughey and yielding, with partial
dilatation, ~~or~~ that the membranes
protrude, or can be felt with the finger,
then Abortion will almost certainly
take place. And yet under these
very unfavorable circumstances
the Physician is justified and indeed
required to make all efforts to prevent it.
Cazeaux mentions many cases in
which Abortion was prevented after

the occurance of the above enumerated
Symptoms, by the timely administra-
tion of small doses of Opium or Laud
"num frequently repeated, To these
remedies strict confinement to bed
and absolute rest of body and mind
with cold acidulated drinks and
cold to the hypogastric region have
frequently succeeded, with the happiest
results to both mother & Child
If the woman have had previous
Abortions and we suspect that this
has been the result of Syphilitic taint
in either the Maternal or Paternal
System we should persuade them
to submit to a Mercurial course,
but when they have been induced

by displacement of the Uterus the latter should be remedied by appropriate measures, such as the avoidance of all fatigue and violent exertion and should confine herself as much as possible to the recumbent posture, until the Uterus rises above the superior strait. I might multiply the causes ad infinitum but deem it unnecessary and necessary my first and imperfect attempt to close by briefly mentioning the most common of all causes known to the profession, namely those resulting from accidents or emotional influences. The treatment will vary with the

particular case, if the woman be robust, pulse full ~~and~~ strong and frequent and plethora exist we would at once take blood from the Arm place her in the horizontal posture and apply cold to the hypogastrium and administer opiates at short intervals, but if she be anemic and will not bear blood letting our main reliance is to be placed in Opium in connection with the remedies usually employed in such cases.

On

Inaugural Dissertation

On Malaria.

Submitted to the examination

of the

Provost Regents and Faculty of Physic

of the

University of Maryland.

for the

Degree of Doctor of Medicine.

by

George W. Fay

Author's Preface

In attempting to prepare a treatise on this [illegible] subject [illegible] [illegible] [illegible] that it has been [illegible] of many wiser heads, [illegible]

[illegible]

Malaria.

In those regions of our globe situated within or near the tropics nature is clothed in the most gorgeous robes. The vegetable creation flourishes with a degree of splendor and magnificence elsewhere unknown. Innumerable varieties of the most medicinal and beautiful plants and flowers adorn the banks of every rivulet, and furnish a variegated carpet for every field— the most delicious fruits spontaneously mature and ripen almost every month in the year— all combining

to please the eye and gratify the taste of man. While the feathered songsters which inhabit every woodland and grove, pour forth their richest melodies to charm the ear — and the placid waters of the gently rolling streams invite the "lords of creation" to come and live in their transparent waters. but, alas! every rose must have its thorn, and even in these almost Paradisaic regions there lurks a poison which brings disease and death to the inhabitants. It is wafted on the wings of the wind. It taints the life-giving atmosphere which we breathe. We call it Malaria or Miasm; but what it is we cannot

tell. Of its nature we are entirely ignorant. The chemist can analyze the atmosphere which contains it and resolve it into its constituent elements, but the presence of the poison, his science is, as yet, incompetent to detect. The philosopher by the aid of his instruments has been enabled to describe to us the wonders of the microscopic universe. He has demonstrated the existence of organized beings all around us, which the unassisted eye cannot discern, and to such a degree of perfection has this science been brought that in certain fossiliferous strata of our earth, petrified animalculae

have been found so minute that forty one trillions of them would occupy but a single cubic inch, and forty ... thousand of these organized beings having limbs, eyes &c like those of larger growth, could pass at once through the eye of a common sewing needle. The fact that such keenness of perception as this is unable to account for the malaria in the atmosphere has led some to deny the possibility of its existence there, but the facts already stated show that the limit to the divisibility of matter [illegible] yet been reached, and that beyond the

inconsistent with health.

Various theories have been advanced to account for this miasmatic [illegible] some of which we will [illegible] [illegible]. Carburetted Hydrogen [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

in Africa found that certain [illegible] [illegible] "had become notorious as the [illegible] of miasmatic effluvia." He procured some of the water, and on analyzing it, found it to contain sulphuretted hydrogen, he at once

that electro-galvanic

disturbances in various ways and
under diverse circumstances, without
perceiving
to account for the existence of
malaria, seems to be, that which
ascribes it either to invisible
vegetable matter, decomposition—
as is supposed—promoting the generation
of their preexistent germs.
Among the num

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Unquestionably [illegible]

[illegible] and rapid [illegible]

position going [illegible]

localities, and it is very [illegible]

that this may cause the [illegible]

properties of the atmosphere.

It has been objected to this, that the same decomposition is constantly going on in certain localities without giving rise to disease.

It is true that this hypothesis corresponds to the

How [illegible]
[illegible]
[illegible]
[illegible]
knowledge of [illegible] of [illegible]
connected with [illegible]
[illegible] by [illegible] from effect
back to cause, and by this process
alone we have become acquainted
with the [illegible] of [illegible]
besides those produced by gaseous
[illegible], Hence we shall [illegible]
proceed to consider its effects.

The diseases produced by the [illegible]
according to some authors include
a very wide range, but Periodic
Fever is universally conceded to be

the direct effects of malaria, and this disease in its various forms is the only one which we shall here consider. This fever has been noticed by every practitioner of medicine within the region where it prevails, to assume a diversity of types and forms in different patients, even though they may have been subjected and to all appearances placed [illegible] by similar circumstances.

Writers on this subject have frequently classified these forms and designated them by certain names according to their own fancy or their individual observation.

Of these various classifications, that

which seems to be most reasonable and to all appearance is sufficient, specific, designates them by only two titles, Viz. Intermittent [illegible] and Remittent or Bilious Remittent. Intermittent fever is characterized by febrile paroxysms occuring at stated intervals, all [illegible] fever [illegible] vals. The time from the [illegible] one paroxysm [illegible] another is called the intermission, and the length of this intermission [illegible]. It is therefore called a quotidian, tertian, a quartan &c according as the paroxysms recur [illegible] other

two hours respectively. Some authors

distressing, [illegible]
or rapid and [illegible]
through the [illegible]
chatter [illegible]
often [illegible]
patient. [illegible]
[illegible]
cold to the [illegible]
but [illegible]
for [illegible] observed in which
the [illegible]
while [illegible]

The cheeks are flushed, the surface generally reddened, and the skin distended with blood. The temperature of the body [illegible] and a full, strong [illegible] the mouth is dry and the tongue furred. Deep seated pains in [illegible]

[illegible]

advances—the body approaches its
natural [illegible] the [illegible]
[illegible] subsides—the
thirst and headache disappear and
[illegible]
feeling—with [illegible]
[illegible] until
[illegible] period for another paroxysm

comes round. These are the phenomena exhibited in a [illegible] fully developed ague fit. But these several stages are subject to numerous variations. Sometimes one or more of the stages is wanting or so slightly marked as to be scarcely perceptible. Among the anomalies [illegible] of this disease [illegible] singular character has been observed. A single limb is seized with a chill and passes regularly through all the stages of ague, while the rest of the system is apparently undisturbed. But it is unnecessary [illegible] of the [illegible]

[illegible]

[illegible] It usually yields to the proper treatment and when so treated is seldom fatal.

Closely allied to Intermittent Fever is the form called Remittent Fever. The distinguishing characteristic of this disease is, that it exhibits alternate exacerbation and remissions, without intermissions. On account of the similarity of this disease to intermittent, it has been mistaken by many that it is merely the same disease aggravated by a more intense operation of the same malarious causes, and the evidence in favor of this supposition is [illegible] [illegible] [illegible] [illegible]. The [illegible] form of

remittent fever is generally preceded by the [illegible] languor [illegible] in the [illegible] the back, [illegible] [illegible] widely in [illegible] [illegible] increased heat of the whole system. The pulse becomes quick, the respiration hurried and anxious, the eyes [illegible] the face flushed and turgid, the skin dry and constricted, while great

uneasiness and [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

is red at the edges the [illegible]

[illegible] a light brown or yellow-

[illegible] After a few days the skin

[illegible] assume a yellow hue.

A single exacerbation usually lasts from

eight to twelve hours, terminating with

a slight perspiration and general

abatement of all the symptoms

after which the patient falls into a [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] according to the [illegible] lence of the attack, and [illegible] with the same symptoms often increased in violence. In very malignant forms of the disease the exacerbations are marked by unusual intensity of the predominant symptoms with gradual sinking of the vital powers, and unless it is checked at this crisis, the surface [illegible] becomes covered with a cold clammy sweat — the pulse is small and weak — the tongue thickly coated — the respiration rapid and difficult — the abdomen swollen and [illegible] — coma often

[illegible] by involuntary discharges from the bowels and death terminates the scene,

In the milder forms of the disease or when it is modified by proper treatment, each succeeding paroxysm diminishes in violence the [illegible] surface less, the gastric distress and pain in the epigastric region subside, the exacerbations are of shorter duration, the skin becomes softer, the tongue less coated, the countenance more cheerful, and the patient is soon in a state of convalescence,

This constitutes a brief and cursory

glance at the two principle forms of disease caused by malarious effluvia. and since this is all that is necessary for our present purpose, we leave this branch of the subject without stopping to enquire into the proper treatment, or pathology of the disease, and turn to another view of malaria. Viz. How we know that it is miasmatic poison which causes these diseases — what the cause which gives it and the circumstances that [illegible] it.

It has been observed that a certain degree of temperature is necessary to the production of this deleterious agent. A continuous heat of

more than 60° Farenheight is supposed to be necessary to its development. It is seldom tracable beyond the 60th degree of North latitude and even when its effects are seen there it is generally found on inquiry that patient has first acquired it in some other locality. During residence of about fourteen years in the state of Massachusetts, I have never seen a single case of malarious fever there. One case which I saw in Vermont and another in the state of New York both proved to be in persons who had been exposed to malaria in some of the western state.

As we approach the equator, the poison becomes more abundant and virulent.

A certain degree of moisture is also [illegible] of country where it is known to be generated, certain elevated or hilly [illegible] which are of a low and [illegible] the [illegible] Certain [illegible] in the upper provinces of India, have long been known as malarious districts, and it is said that it is not only impossible for mankind

to exist there, during the summer months, without being infected, but that the tigers, antellopes, monkeys, and everything that has the power of locomotion, instinctively desert them in the early part of Spring and go up to the hills, to remain until Autumn and then return, but these hilly regions do not always escape the vistilation of marsh miasm. It has been observed by many persons living in tropical regions that winds blowing from the direction of marshes cause malarious fever among the inhabitants of the adjacent uplands. In confirmation of this, I observed while residing in Alabama, several

cases of ague among the inhabitants of those higher lands, which were to all appearance, free from the causes which generate malaria. but a little observation rendered it conclusive that that poisonous exhalations were brought by [illegible] from the adjacent marshes, on the [illegible] of which no effects [illegible] existed. I was told by [illegible] inhabitants of that state, [illegible] the [illegible] were located on the banks [illegible] the fertile river lands. The consequence was that they were swept off by hundreds, particularly the children

and younger portion of the inhabitants the older people though almost universally attacked with fever usually survived them, and even now it is rare to see a white native of that state who has not at some time during his life suffered from malarious fever. The occupants of several plantations situated on the hills overlooking the river valleys, I found, were affected by the prevailing miasma during the summer, while those further back from the streams, on the second range of hills, were comparatively free from it. An interposing forrest, a field of tall corn, a large growth of sun-flowers,

or a stream of running water, seem to arrest the progress of the poison. Persons can sleep with impugnity on ship-board near a malarious coast, while those sleeping on shore are almost sure to be infected. The night is the most dangerous time to visit places near the marshes and swamps of malarious districts. Hence persons sleeping in such places are more exposed than those who merely remain during the day and leave at night. Persons sleeping in the first story of dwellings are more likely to suffer than those occupying the second story. From this and other facts of a similar kind, it

has been infered that the poison is heavier than atmospheric air and is most abundant near the ground.

According to abundant testimony vegetable decomposition is a very fruitful source of malaria, and is generally considered absolutely essential to its production. Newly cleared lands where forrests have recently been cut off, or the draining of bodies of water leaving a vast amount of vegetable matter exposed to the rays of the sun and consequently in a state of rapid decomposition, are places almost invariably

visited by fevers.

The poison seems to have a strong affinity for moisture. Fogs which are generated during the night, appear by their deleterious effects on those exposed to them, to be loaded with miasm, while a heavy shower of rain often purifies the infected atmosphere by concentrating or washing out the poisonous elements.

The colored race are [illegible] affected by malaria, though in places where it is evolved in large quantities they are not entirely exempt from it.

Strangers visiting an infected region

are much more likely to suffer
than the indigenous population
whose systems have gradually
become accustomed to it.

Volumes might be filled with
facts relating to this subject, but
those already enumerated must
suffice. Cinchona, which, in its
various preparations, is the great
antidote to this poison, is a
most fruitful subject for
investigation, but as it does not
necessarily enter within our province
in this place, we leave it
to be enumerated in [illegible]

An Inaugural Dissertation on Natural Labor.

Submitted to the examination of the Provost, Regents and Faculty of Physic of the University of Maryland for the Degree of Doctor of Medicine by Daniel Edgar Lee.

Natural Labor.

Definition.

The term "natural labor" is applied to those cases in which the head of the Child presents, and descends regularly into the pelvis: where the process is uncomplicated, and concluded by the natural powers within Twenty four hours, with safety to the mother and Child, and in which the placenta is expelled in one time.

The precursory symptoms which indicate the approach of labor are, 1st the subsidence of the Abdomen 2nd frequent Micturition 3rd griping and tenesmus.

Symptoms of Labor.

The Commencement of labor is dated from the time that the Uterine Contraction become painful, provided the Uterus is engaged and the pains recur regularly and continue without suspension.
Labor is divided into Three Stages. The first is That in which the Uterus contracts and forces the head of the Child Through the Os Uteri. The second is That in which the head passes Through the pelvis and Vagina. The Third Stage is the expulsion of the placenta. in some cases the pain which expels the Child also expel the After-birth

The pains during labor have been divided

into two kinds. cutting or grinding pains. and bearing down or forcing pains. The cutting pains are confined to the first stage of labor and dilitation of the os. uteri. They are short severe, and generally seated in the back. gradually extending around the loins to the abdomen and thighs. They occasion considerable suffering. and forces the woman to groan and make loud outcries. The sharp shrill cry is diagnostic of this stage of labor. The patient is generally more irritable during the first stage than subsequently, frequently changing her position. She is low spirited and fearful. constantly anticipating evil, and

refusing to be Comforted. As the labor advances this distressing despondency disappears. Sometimes there is a partial and temporary delirium, occasioned by the passage of the head through the Os Uteri. or Os. externum. It seldom lasts more than a few Minutes. During the first Stage of labor at the time the head is passing through the Os Uteri. rigors occur, not from Cold, as they are observed when the surface was warm. The surface generally, is of the usual temperature, and free from perspiration, until near the end of the Stage. During this Stage the Stomach is sometimes irritable, and discharges its Contents. An-

internal examination reveals the condition of the passages, the state of the os uteri, and the rate of progress. At an early period, the Vagina is cool, moist or dry, and undilated. At the commencement of labor, the os will admit the point of the finger. and after a while, it will gradually dilate, so as to allow the the head of the child, to pass through. Towards the end of the first stage, or when the os is pretty well dilated, there is an increase of sanguineous fluid in the vaginal discharge. About this time the membranes generally give away. the liquor Amnii escapes and the next pain forces the

head through the os. Uteri. and enters upon the second stage. The pains are now more severe, and more frequent. The intervals shorter. And there is greater suffering in general. The cry now is not so sharp. as in the first stage. At the onset of each pain. the woman holds her breath, and seizing hold of the bed-post: or the hands of her attendant: brings the muscles of the extremities, and of the back and abdomen to aid the expulsive force of the Uterus, These are called the bearing down pains" of the second stage. During this stage. the face becomes almost purple. the veins of the fore-head and temples are distended

with blood, and the eyes are bright and prominent. The heat of the skin is greatly increased, and a profuse perspiration ensues. The pulse is increased in frequency, during an interval. As the head passes through the pelvis, it occasionally gives rise to Cramps and Spasms by its pressing upon the nerves of the lower extremities. The pressure of the head also causes the rectum to discharge its contents, but prevents the emptying of the bladder. At the beginning of the second stage the Vagina is dilated, and the head of the child is at the upper part of the pelvis, At a later period, the head will be felt on the floor

of the pelvis. At this period of labor, when the head is distending the perineum and dilating the external orifice, both the suffering and the exertion reach their maximum point. During the latter part of the second stage, pains succeed one another so quickly, that they are often called double pains, And at length the head is expelled, after which there is a short rest. when again the Uterine power is exerted to expel the body of the child. The second stage is now completed, and if the hand be placed upon the abdomen it will be found flabby, and the uterus large, and slightly contracted. The Third Stage includes the

detachment and expulsion of the placenta. which usually takes place in ten or fifteen minutes.

Management of Natural Labor.

There is but very little for the practitioner to do in a case of natural labor. when everything is going on well. He should always be provided with a lancet. And an elastic male Catheter; And if he live in the Country with some preparation of opium. laudanum. is the best. The first duty of the Attendant is, to ascertain the womans present Condition, whether she be in in labor or not; And if so how long she has been in labor; the nature of the presentation, the rate of progress, and probable

termination. He should first-
examine the skin, pulse, and
tongue, then noting the pains.
their character and frequency. He
should then proceed to make an
examination per vaginam, it is
hardly necessary to repeat it during
the first stage. if all is right the
finger ought always to be introduced
during a pain, as it causes less
distress to the woman during the
pain than in the interval.
During the first stage, the patient
need not be confined to her bed,
but may be allowed to sit up
or walk about the room if she
desire it. Nor is it necessary for
her Attendant to remain in the
room during the first stage.

The Condition of the bowels should be attended to. And if they have not been moved lately should be unloaded by An enemata or an aperient. The condition of the bladder should also be attended to. The patient diet should be light and unstimulating. The practitioner should always have in readiness some strong ligatures of Tape, or twisted twine for the Cord, a pair of Scissors, a few pins, and a binder, or bandage, for the female. He should also see that the bed is properly prepared, this is done by spreading upon the bed a folded sheet or a piece of oiled cloth, to prevent the

waters from soiling the bed-clothes, it also adds to the comfort of the woman by it being removed after labor without disturbing her. The second stage is made known by the rupture of the membranes and the discharge of liquor Amnii. As soon as this occurs the woman should be placed in bed, and the practitioner make an examination per vaginam in order to determine more accurately the position of the Child. It is the usual custom in this Country to place the woman upon her left side, with her hips close to the edge of the bed, and her knees drawn up towards the abdomen. This

position enables the practitioner to use his right-hand with advantage, and is also more agreeable to the woman, as her back will be turned towards her Attendant. When the head has reached the floor of the pelvis, and the perineal Tumor is formed the perineum should be supported by the palm of the left-hand, it being covered by a Towel, it is unnecessary as well as injurious to apply pressure to the perineum until the head has formed a tumor there. As the head escapes through the external os it should be received into the hand of the practitioner, and allowed to perform the motions of Restitution

carrying it forward as the shoulders are expelled. When the Child is born and respiration established, it may be seperated from the Mother, a strong ligature should be tightly tied around the Cord about two inches from the umbilicus. And if there be twins another ligature may be applied above the first and the Cord divided between them. If the Uterus be well contracted, the placenta will probably be found in the vagina; as soon as it has descended so low as to be felt, it should be withdrawn by gentle traction, There should be no force used in this operation for fear the

placenta should be still adherent and inversion produced, or the cord torn from its insertion. After it has been withdrawn, the external parts of the woman should be carefully dried and covered with a warm napkin. After this is done the binder should be applied as to extend from the pubes to the lower part of the sternum, and drawn moderately tight. As soon as this is accomplished the wet sheets should be removed from under her; and she should be lightly covered to prevent chilliness, and then left to have an hour's repose before she is made

comfortable in bed. As soon as the mother is sufficiently rested, the Child should be put to the breast, The secretion proves lavative. And it is said that the application of the Child to the breast excites the uterus to contract. The womans diet should be as light as possible, and she should be kept in a strictly horizontal position, till all danger of hemorrhage is passed, After the Child is born, it may be in a state of Anemia, syncope or asphyxia, from hemorrhage, too early seperation of the placenta, or impaired nutrition. In these

cases the Child should be plunged into a warm bath, if this fail, light and rapid friction of the body and extremities with flannel, with or without stimulants. When the Child is in a state of Asphyxia from prolonged labor, the cord should not be divided, until respiration has been established, if the above means fail, the cord should be cut across and a small quantity of blood be allowed to flow, if this does not succeed, the case is hopeless. Sometimes there takes place from the navil a very troublesome hemorrhage

which is very generally difficult
to arrest. It is not however of
very frequent occurrence.
Compresses are employed in
these cases, Escharotics. And
the Actual Cautery are also
used. Some have Cutting down
to the Vessel and Tie it. Others
have recommended plaster of
Paris in powder which by
becoming solid in spite of
the hemorrhage would effec-
tually plug the Vessels,

Dissertation

on

Diabetes.

Submitted to the examination

of the

Provost, Regents & Faculty of Physic

of the

University of Maryland,

For the Degree of

Doctor of Medicine,

by

Harry W. Wings

of

Baltimore, Md.

Diabetes.

Diabetes, from Dia Baivw I pass through, is a disease, characterized by great augmentation and manifest alteration in the secretion of urine, with excessive thirst and progressive emaciation.

Cullen describes two species—Diabetes insipidus and Diabetes mellitus; the former being simply a superabundant discharge of limpid urine of its usual taste; the latter Diabetes mellitus, coming more strictly under the definition above, that is characterized not only by augmentation but also by alteration of the urine, the alteration consist-

ing of the presence in that fluid of saccharine matter.

It is of this form that we shall speak in the following pages, and we shall restrict the term diabetes to it, the second form, above.

Dr Thomas Willis the distinguished anatomist and physician of Charles II. was the first to describe this condition of the urine – "what so many writers" says he "have said as to the urine (in diabetes) differing little or none at all from the drink that is consumed, is very far from the truth; for the urine in every case that I have known, and as I believe universally, differs entirely not-

...ly from the drinks imbibed, but from every fluid in the body, having a remarkable sweetness, and tasting as if mixed with honey or sugar."

The symptoms of diabetes are very remarkable and, in conjunction with the sweet taste of the urine, quite distinctive of the disease. In the beginning, there is general indisposition; uneasiness, restlessness, disordered digestion, loaded tongue, hot and dry skin. Acid eructations are frequently complained of and more uniformly, a sense of constriction and heat at the precordia cordis. With this there is an intense craving for food and an insatiable thirst; when

and the patient to swallow an immense quantity of solid food and a still greater amount of liquids. Notwithstanding the large quantity of food taken and its apparent readiness of assimilation, the patient withers visibly, he complains of weakness and pains in the limbs, his countenance becomes hollow and the expression one of despondency, languor and exhaustion, expressive of the condition of the system — the body wasting, the mind enfeebled.

"At an early period in the disease, he experiences a frequent desire to micturate and voids an increased quantity of urine, which has a sweetish, hay-

like smell, is of a pale yellow or straw color, or sometimes of a slightly greenish hue, with a saccharine taste, and is of high specific gravity, ranging from 1.030 to 1.060, the average being about 1.0740; while healthy urine varies from 1.015 to 1.025.

Chemical tests reveal the usual amount of saline ingredients, urea, formerly thought to be absent, is as abundant, sometimes more so, than in healthy urine. The only alteration consists in its holding in solution sugar.

The quantity of urine voided is sometimes enormous. Morgagni gives a case in which the daily amount passed was forty two pints, even seventy pints have

been known, but fourteen or fifteen are more common. As we might expect, from the evacuation of so much fluid through the kidneys, we find the skin harsh and dry and no perspiration from it, the bowels costive, the faces dry, the tongue parched and sticky.

The great daily waste gives rise to the symptoms of impoverished nutrition. For, at the specific gravity of 1.040, in every two pints of urine, the patient loses more than a pound and a quarter. With this fact known, we have no difficulty in understanding the hunger, wasting, the feeling of emptiness and sinking at the stomach, the debility, the loss of virility and the aching of the limbs. The peculiar

odor, taste, high specific gravity and probably the quantity of urine, is accounted for by the presence in it of sugar.

The saccharine matter may be detected in several ways - if the urine be boiled with an equal quantity of Liquor Potassae it will assume a claret color, of greater or less depth according to the amount of sugar in it. This is recognised as Moore's test - another is that of Trommer - mix with some of the suspected urine enough sulphate of copper to give it a slight blueish tint, then add liquor-potassae in considerable excess; if the urine contain sugar there will be, first, a precipitate of oxide of copper, which will be dissolved in

the excess of alkali forming a dark blue solution, if this be heated a deposit of red suboxide of copper takes place.

Yeast also forms a good test for diabetic urine. Dr Watson states that half a grain of sugar in two ounces of urine can be detected by it.

This sugar may be crystallized by evaporation, in a case now in the Bath more Infirmary by evaporating the urine to the consistency of syrup & then drying it is deposited in beautiful crystals; it is occasionally so abundant as to form a white powder, upon drying, wherever it falls.

The causes of diabetes, are but slightly understood. The disease occurs most often about the middle period of life, but has been

known to attack children of from three to five years old, as well as persons far advanced in years. It is equally as frequent among those of temperate, as among those of dissipated habits: sex appears to have no influence on its production.

Of the remote causes, inherited predisposition is one of the most potential; of the exciting causes, exposure to cold seems to be most influential, yet the disease is of frequent occurrence in Ceylon, where the natives are but little exposed to vicissitudes of temperature, and is altogether unknown in Russia, where extremes of heat and cold are endured.

The proximate cause of diabetes has been the subject of much discussion

amongst pathologists. Rollo, in the last century, and most of the English writers after him have fixed the seat of disease in the stomach. "increased secretion, with a vitiation of the gastric juice and probably too active a state of the lacteal absorbents", according to Rollo, are the efficient causes of the morbid phenomena. Baillie, whilst he admitted that the chyle might be so imperfectly formed, as to be ready to afford saccharine matter, by the action of the kidney, thought it probable, that diabetes was particularly owing to a derangement of the secreting function of the kidney, and even to a structural change in its secerning portion. While Frank thought it was due to "an animal

poison, a diabetic virus engendered spontaneously, or innoculated into the economy like that of rabies; he even believes that the disease may actually have been induced by the serpent dipsas as related by the ancients. This virus, however formed, he imagines exerts an especial influence upon the nerves of the fauces, of a character the opposite of that of rabies, occasioning unquenchable thirst instead of an invincible dread of water. The virus through the medium of the nerves, farther influences the lymphatic system in a peculiar manner, arousing it to unwonted activity and causing excessive absorption from all the secreting surfaces of the body - those of the mouth, stomach, skin &c.

whence the thirst, which he says is the first symptom manifested, and the passage of the chyle into the secundæ viæ crude and unconcocted, not because of any weakness in the stomach, but in consequence of premature absorption.

The increased flow of urine follows hurrying along with it the imperfectly elaborated nutrient principles supplied by the food, and the juices that have already undergone all the degrees of animalization, the consequence of which is the the phthisis pituitosa, the consummate disease".

A purely chemical theory was propounded by Dr Lubbock, who supposed that, in consequence of the suppression of the cu-

taneous functions, the proper quantity of carbonic acid was not eliminated, but being retained, entered in to combination with the carbon, hydrogen and oxygen of the blood, and went to the formation of the sugar.

McGregor published in 1837, his theory of the cause of diabetes. He, in experimenting upon the serum of the blood of diabetic patients, detected sugar in it, and found the specific gravity to be 1.033, that of healthy serum being 1.029. The taste of the serum was less saline than natural. He also traced this sugar back to the stomach - He administered an emetic to a healthy man, three hours after he had dined, added yeast to the ejected matter and fermentation

took place, thus proving that sugar is present in the stomach in health. A patient with diabetes was the subject of a similar experiment, when fermentation continued actively for twelve hours. To prove that sugar was formed in the stomach and not introduced in the vegetable matter, two men, one in health, the other diabetic were vomited and purged, and fed on roast beef and water for three days, at the end of which time, he administered his emetics of Sulphate of Zinc. The matter obtained from the stomach of the first did not ferment, from the other, the diabetic, stomach, he obtained matter which upon the addition of yeast fermented briskly, though not

as strongly as before. He next examined the saliva, the liquid of the alvine evacuations and the perspiration; the presence of sugar in the saliva was easily demonstrated, the sweat could not be made to ferment, the faeces allowed to dry, became covered with crystals of sugar. Yeast being administered to the patients in doses of two ounces after each meal, had to be discontinued because to use their own expression they were "on the eve of being blown up".

From these facts, the key to the right understanding of the morbid phenomena of the disease was, he supposed, easily deduced, namely derangement of the stomachic digestive function.

Bernard has since discovered that the healthy liver secretes sugar, that it can be found in the liver, hepatic veins and right side of the heart and that it is finally consumed in the lungs.

Another discovery of Bernard's is that artificial diabetes may be produced in an animal by irritating a portion of the floor of the fourth ventricle of the brain, near the origin of the pneumogastric nerves. Within a short time, the urine of the subject of the experiment, becomes saccharine and remains so for a day or more. He also found that the quality of food has no influence upon amount of sugar formed in the liver.

These discoveries have given rise to new theory of the origin of diabetes - either, the

hepatic sugar is formed in excess, or there is more of it than can be consumed in the lungs, or the natural amount of sugar fails to be consumed. In either case the sugar, retained in the blood, passes at length into the urine.

Pathological anatomy has not contributed to clear up the nature of diabetes. The nervous centres and great sympathetic have been observed with traces of disease in fatal cases; the brain and spinal cord hardened, and the sympathetic having three or four times its ordinary diameter after its passage through the diaphragm. The chylopoetic viscera have been found in a plethoric condition, the veins connected with the portal system overloaded. The stomach

has been noticed of double its natural capacity; its mucous membrane thickened, highly injected and of a dark color. The stomach and small intestines appear distended with a large quantity of green-ish colored fluid of unusual acidity.

The liver has been found in various states. Its secreting faculty is remarkably implicated, as is seen in the bile, in every case this fluid is found to possess acid instead of its natural alkaline reaction and to be of a pale yellowish color.

The kidneys the organs to which we would naturally look for evidences of disease have been found wholly unchanged though pathologists generally represent them as enlarged and softened. Their blood ves-

sels of greater magnitude, and their blad-
ders and ureters of larger dimensions
than common.

The lymphatic glands have been found
enlarged softened and of a redder hue
than natural. The great intestines are gen-
erally impacted with greenish colored dry
faeces without the usual excrementitious
odor.

When diabetes has continued any time the
lungs are found more or less diseased.

In those who die without complication with
pulmonary disease, or rather, in those who
die from the exhaustion occasioned by dia-
betes alone, the fat appears not to have been
removed in ratio with the muscular
attenuation and the bodies want the usual

cadaverous odor, even the serous cavities are without the smell which is so characteristic of them.

Watson in his work on Practice speaking of the causes of the disease, after enumerating some of the popular theories, remarks "it is probable enough that the exciting cause of diabetes may sometimes lie in the digestive organs as Mr McGregor supposed" and further on — "We may ask whether there may not, in fact, be two varieties of diabetes mellitus, in one of which the animal (hepatic), and in the other the the vegetable, form of sugar maybe present in the urine: and whether the one of these varieties may not be more hopeful of cure or recovery than the other."

Though he objects, to the sugar ever coming

from the liver, in a preceding paragraph; that "the natural secretion of sugar goes on in the liver in a healthy person irrespectively of the kind of food which he may eat: whereas the quality of the food has a most striking influence upon the amount of sugar in the blood and in the urine of diabetic persons. Here the Dr, as we shall presently see, is mistaken in the statement that restriction to animal diet always has an influence upon the amount of sugar in the blood and urine. In the majority of cases this restriction to animal diet cannot, on account of the stomach's repugnance to it, be persisted in long enough, for us to judge of its potency in restraining the

elimination of sugar through the kidneys. In a great many of the few cases in which it is fairly tried and persevered in, it is found to fail utterly. Now if the sugar always comes from the stomach this restriction ought always to influence its amount.

We object again, that healthy hepatic sugar differs sensibly from that of diabetes: but in this disease the liver as is seen by the condition in which the bile is found, is affected; and why may it not secrete a different kind of sugar in disease from that of health? for as he admits Dr Pavy has shown that the different kinds of sugar are readily convertible into each other.

We shall hold, until we obtain a better theory, for it is merely a theory, though a very plausible one, that there are two varieties of diabetes, in one of which the sugar is formed in the stomach, in the other in the liver.

In the healthy stomach, amylaceous food is converted into glucose, as one step in digestion, in this disease, from some derangement of the digestive function, the further digestion is arrested, and the glucose is absorbed, and finally thrown off by the kidneys. This derangement is peculiar and is purely functional.

In the other form some cause occasions either too rapid a secretion in the liver or prevents its consumption in the lungs.

From the discovery of Bernard, that irritation of the base of the fourth ventricle produces sugar in the urine, we can understand how injuries of the Brain, or even mental depression, may occasion this disease, and remembering the distribution of the pneumogastric nerve we can readily perceive how it may produce either the formation of sugar in the stomach or prevent its consumption in the lungs.

The action of the kidneys is purely secondary it is the attempt of a great purifier of the system to get rid of a foreign matter in the Blood, the sugar.

Diabetes is generally a chronic disorder running on under proper treatment for years

exhibiting, sometimes, something of an intermittent type: it is occasionally however of an acute character running its course in a few weeks. When it occurs uncomplicated with any other disease the patient sinks exhausted and fairly worn out. More commonly some vital organ, especially the lung, feels the effect of the cachectic state of the system, tubercles are deposited, and the unhappy subject is released from his sufferings, under the symptoms of phthisis, or general dropsy takes place, or diarrhoea occurs, and easily overcomes the now feeble powers of life.

This a very formidable disease, the prognosis is generally unfavorable, it has seen

been questioned, whether any case of ultimate and perfect recovery, from the confirmed malady, is yet to be found in the annals of medicine; but this is going rather too far. The disease has been kept at bay for years by treatment, and the patients have finally died with their lives not, in all probability, materially shortened by it, again the disease is one of function and analogy leads us to suppose it curable. All the cases in which there seems to have been any improvement, were those in which the treatment was commenced early before the habit, if we may so speak, had been fairly formed in the system. Unfortunately the disease is generally overlooked until

it becomes irremediable, and it is not till then that the physician is called in.

The treatment recommended for this disease has varied greatly according to the different theories held, by the writers, of its cause and origin.

Dr Watson gives the following indications for treatment. 1st. To restore the defective power of the digestive apparatus. 2nd To cut off, or restrict as much as possible, the supply of saccharine matter from without. 3rd To mitigate or remove the most distressing symptoms. And "if" continues he "we could achieve the first of these objects, the other two would fall out of sight, for the disease, which may be regarded as a variety of dyspepsia

would be cured. But hitherto the resources of our art have in this respect been baffled. Our main hope of ultimate success must lie in the regulation of the ingesta, whereby also the second indication is to be fulfilled": and he recommends restricting the patient to animal food, a practice which in some instances appears to have done much good, as in two cases of Garrod's, which Watson cites, "in one of which by regimen alone in a few days the daily amount of urine was reduced from 35½ to 10 fluid ounces, while the quantity of sugar voided with it, from 26 to rather less than 4 ounces". In the other the urine fell from 267 to 9½ fluid ounces. In both these cases the general symptoms underwent a proportional

improvement as the amount of urine became less; this is not universally so; this treatment, sometimes, not only fails in moderating the amount of sugar secreted but this amount actually increases steadily under its use. Andral gives the following- a woman who in the intimate persuasion that an exclusive animal diet could alone cure her, had the courage to subject herself to it during nearly two months without deviating from it for a single day. During the whole of this time, she ate nothing but roast or boiled meat, and drank nothing but water to which a little alcohol had been added. At the end of the two months, she was obliged to give up this regimen, which had become insupportable to her;

and besides, she was no better. At the moment of commencing this plan, her urine yielded 27 grammes of sugar to the pint. During the early trial of it, the proportion of sugar fell by degrees to 20, 15, 12, and at last as low as 10 grammes to the pint; then suddenly, and without the remotest ground for supposing that any breach of rule had occurred, the proportion of sugar voided began again to rise. She now saw it progressively mount from 10 to 15, 20, 30, 41, 47, 49 grammes to the pint." She was now put upon a mixed diet, when the sugar again temporarily diminished but finally rose to 54 grammes to the pint.

And he adds, this is not the only case

of the kind. Another patient who lived entirely upon animal food produced during 24 hours 656 grammes, or more than twenty ounces, of sugar.

Again, some cases have been reported, in which the patients were decidedly benefitted by being treated with sugar. Budd relates in Braithwaite for July 1858 a case in which under the animal diet the disease had gone on increasing until the daily amount of urine had risen from nine to seventeen pints the specific gravity remaining the same. Finally he reversed his treatment, put the patient on generous diet and gave him 8 ounces of sugar candy and 4 ounces of treacle daily, when the quantity of

urine gradually decreased until 3 pints only were passed of the specific gravity of 1032 during the 24 hours, yet at this time he was taking 8 ounces of sugar and 6 ounces of honey besides vegetable matter. Afterwards the quantity of urine increased to from 4 to 5 pints daily, the specific gravity remaining about the same. He concludes, "In other respects, his state is very satisfactory. He is ruddy, looks in very good condition and declares himself to be strong and well. His tongue is moist. he no longer suffers from thirst, and his skin, from being dry and harsh in the extreme, has become soft and natural. He has increased in weight from

107 lbs, which was what he weighed shortly before beginning the sugar treatment, to 126½ lbs." There have been several other cases of the same kind reported.

We have seen that the stomach forms sugar more readily from vegetable aliment than from animal, while the liver equally well from both, therfore we can rationally expect good from the restriction to animal diet only in those instances where the fault lies with the stomach. Yet as we cannot tell by the symptoms where the sugar is formed we are justified in trying a restriction to animal food, though we will often find it necessary to change our treatment. Even when we find this restric-

tion doing good, we cannot continue it long before the stomach rejects the diet, and we are obliged to relax our rule and immediately the quantity of sugar increases. The diet should be as varied as possible; the patient should be allowed to select from the the meats, game, fish, and poultry; he may also have cabbage, celery and other green garden stuff, which have next to no amylaceous particles in them. Fruits must be forbidden and he should use only brown bread. His drink should also be restricted, it had better be animal broth, tepid as he will then take less than if it were cold.

The third indication of Dr Watson is to be fulfilled upon general principles.

Opium by its general sedative power greatly relieves the distressing symptoms, it quiets nervous irritability and restrains the flow of urine, though it does not diminish the quantity of sugar in it. It should be given in moderate doses, combined with ipecacuanha or tartar emetic, to aid the tendency of opium to the skin; the tartar emetic is said to be useful in allaying the painful sensations at the pit of the stomach. Dover's powder may be used in five grain doses.

Bloodletting, advocated by Watt and Satterly, who state that under small & repeated bleedings the strength increases, the skin becomes soft and moist, and the clamminess of the mouth disappears, may

be useful when there is much feverish excitement. Leeches or cups may be applied to the pit of the stomach, when feeling of burning or constriction are complained of there, or to the region of the kidney, if there is pain or uneasiness there.

The naturally confined state of the bowels and the action of the opium require the use of aperients. Rhubarb and aloes, extract of colocynth and castor oil are the best of the class in these cases.

Mercury has been tried in this, as well as in all the other diseases that humanity is heir to. Small alterative doses, of the milder preparations, might be useful. Dr Prout states however that he never saw mercury do good, on the other hand, it generally did harm.

Watson tells us of another drug from which he thought he had seen beneficial effects - creasote - and relates two cases, in which under its use, in combination with animal diet, the urine decreased in quantity and specific gravity; though as he states he could not tell how much was owing to the creasote or how much to the animal diet.

The preparations of Iron are useful, in repairing the loss of strength &c caused by the drain upon the system.

Camphor has been recommended by different authorities, its anodyne effect and its faculty of exciting the skin would lead us to expect good from its use.

Alum has been tried for its astringent power

but astringents seem to do harm rather than good in diabetes.

Heufeland recommended the bile of the ox. The bile which is, in this disease, found in an abnormal condition and is probably unfitted for the accomplishment of the end for which it is prepared, has as we know an important influence in the digestion. If we can by the use of ox's bile supersede this deficiency of the digestion we might look for good effects.

Dr Copeland found Turpentine useful.

Of the multitudes of other remedies, Magnesia, first advised by Trotter, who gave it in large doses, and in two cases successfully, appears to be useful and is highly spoken of by several writers.

It is very important to restore the action of the skin, this is hard to do but may generally be accomplished by the sudatorium. This has been considered a powerful prophylactic against the disease, and it is curious to know that in Russia where it is in daily use the disease is entirely unknown. Dr Watson gives two cases in which the hot air bath was very useful, though it did not cure the patients.

Among topical measures, Blistering may be used with hope of improvement in some cases, over the stomach or kidneys to produce counter irritation.

An
Inaugural Dissertation
on the
Vascular System
Submitted to the
Regents Provost Senate Faculty of Physic
of the
University of Maryland
for the degree of
Doctor of Medicine
by

Isaiah Dowling
of
Maryland.

Gentlemen.

In accordance with the rules and regulations that you have adopted for the government of Candidates for Graduation in the University of Maryland; it now becomes my duty to acquiesce in your decission and I therefore proceed to spread for your honorable Consideration a few pages, on the very important and interesting subject of the Anatomy of the organs Constituting the Vascular System.

As time will not permit me, to enter very fully into details, I therefore propose to consider only the general anatomy of the organs, together with a few remarks I may be permitted to make on the Blood.

I will now enter into the consideration of the different organs which are collectively included

under the head of the Vascular System;
First we have the heart the great centre of the circulation, in fact the very main-spring of life itself; next we have the arteries, then the veins and lastly but of not any less importance the capillaries.

The heart is a hollow muscular organ, lying within the cavity of the thorax and enclosed between two layers of the pleurae, constituting the Mediastinum, and surrounded by the pericardium.

The pericardium is a fibro-serous membrane, partaking of the general character of serous that of being a strong tissue; the fibrous portion taking hold at the base of the heart at the origin of the great vessels as also at the diaphragm, the serous portion being entirely reflected over the heart itself.

The heart is divided into two auricles and two ventricles, the former of which are intended by Nature as the reservoirs for the reception of the blood returning from the pulmonary circulation, the left and the right receives that blood sent back from all parts of the body through the medium of the vena cavae as also the coronary veins, to be oxygenated by the lungs which is at length sent again all over the body.

The ventricles are intended by the same wise provision as the forcing organs by the contractions of which the blood is sent to all parts of the body.

The base of the heart is upwards, backwards and to the right side, while the apex is downward, forward and to the left and may be felt pulsating between the fifth and sixth ribs

and two or three inches to the left of the sternum in a healthy grown person; it is convex in front and flat or a little concave posteriorly where it rests upon the diaphragm).

The right auricle larger than the left has the following peculiarities, viz the opening of the ascending and descending vena Cavae, the Tuberculum Loweii an elevation between them caused by the thickening of the membranes; Lower supposed it to be for the purpose of directing the current of blood towards the auriculo-ventricular opening.

We have then the Eustachian valve, we also find a number of small foramina called the foramina Thebesii through which the venous blood exudes into the right auricle from the muscular structure, without

enterin the venous circulation; they are also found in the other auricle as well as in both ventricles, then we have the opening of the coronary vein, then the fossa ovalis an annulus ovalis both relics of foetal structure found in the septum auricularum; and in the appendix auricula which has been termed the true auricle which may be found appended to the right side of the auricle overlapping it we find the musculi pectinati; small muscular cords no doubt to aid its contractions.

Next in order the left auricle. I will now endeavor in a brief manner to describe it is smaller than the right but its walls are thicker, its appendix auricula is constricted at its junction with the auricle

and presents a foliated appearance, we find in the left auricle the following openings the entrance of the four pulmonary veins which returns the blood from the lungs to the auricle, the auriculo ventricular opening; we also find only in the rudimentary the musculi pectinati.

I will now direct your attention for a short time to a brief description of the two ventricles. first the right ventricle its anterior surface is Convex and forms the largest portion of the front of the heart its posterior side is flat and rests upon the diaphragm; we find opening into it the pulmonary artery, we also find the auriculo ventricular opening, surrounded by a cartilaginous ring attached to which

is the tricuspid valve having three points; this valve is for the purpose of preventing the regurgitation of blood from the ventricle back into the auricle; the points or apices of these valves are attached by strong small slips of fibrous threads termed Cordae tendinae, which are attached to fleshy columns found within the ventricles, called Columna Carnea; these columns are divided into three layers, first those which are attached by their whole lengths to the ventricle; second, those which are attached by their extremities and third, those which are attached by only one extremity whilst to the free extremity are attached the Cordae tendinae.
The Cordae tendinae are for the purpose

of preventing the valves being forced or wedged into the auricle by the forcible contraction of the ventricle, exercising therefore a kind of mechanical office.
Situated in the pulmonary artery are the Semilunar valves, three in number formed by the lining membrane of the Artery and strengthened by a small amount of fibrous tissue, they are attached by their convex borders to the sides of the artery whilst their Concave borders are free, their margins are thicker than the other portions and are surmounted in the centre by a little nodule or tubercle, called the corpus arantii.
These valves are for the purpose of preventing the regurgitation of the blood back

into the ventricle, being situated with their free borders upwards in the course of the artery; any of the blood having a tendency to regurgitate would fill the valves, expanding them and by that means and with the aid of the little tubercles interlocking with each other entirely closing the artery.

The left ventricle forms the apex of the heart by projecting beyond the right ventricle, it is conical in form and its walls are considerably thicker than those of the right ventricle; it presents for examination the aortic opening and auriculo ventricular opening with

its fibrous ring which is smaller than that found in the right side; we find the mitral valve named after its resemblance to a Bishops mitre,) occupying the same position as that of the tricuspid valve in the right side, its offices are the same and its structure similar, with the exception that the tricuspid has three points or apices, and the mitral has but two. the free extremities of the apices are attached by the same kinds of tendinous cords that we find in the right side, and is intended for the same purpose; we also find the columna Carnea similarly arranged as in the right ventricle.

The semilunar valves similar in structure to those I have described in a cursory examination found in the pulmonary artery, are found also at the commencement of the aorta and are intended for the same purpose.

I have now concluded what I have to say on anatomy of the heart, in fact the very "fount from whence flows life itself;" the next in order will be for me to enter into a brief and rapid description of the arteries; what are the arteries? They are hollow tubes intended by nature as conduits for the transmission of the blood from the heart to all parts of the body; the name artery was given them by the ancients, the litteral meaning

being air tubes, they being under the impression that the arteries conveyed a vital air or Ether, but by the discoveries and demonstrations of eminent pathologists it has long since been clearly shown that the arteries do convey blood.

Arteries in their course give off a great many different branches; when a number of branches are given off very near each other they have been called an axis. Thus we have the Coeliac axis, the Thyroid axis &c; when one, two, or a number of branches are given off, the branches taken together are larger than the main trunk, and if all the arteries in the body could be placed together it would be made to resemble a cone, the apex at the heart and

the base at the surface.

Arteries possess elasticity and contractility; by its elasticity it is caused to expand at each of the systolic movements of the heart; whilst by the contractility the heart is aided in propelling the blood.

Arteries consist of three different layers an internal or serous, a middle which forms the largest part or bulk of the artery, and an external or cellulo fibrous which is very strong and elastic.

The internal layer is described as consisting of two coats, the middle of three and with the external or cellulo fibrous the artery is said to consist of six distinct and separate layers.

The external layer is very hard, dense

and elastic, the middle and internal more soft and brittle, so that in ligature of the artery the middle and internal are always cut through, while the external is never divided.

The arteries receive their supply of blood for nourishment through the medium of blood vessels, which are termed vasa vasorum; nerves also go to the arteries.

Veins are those vessels or hollow tubes that conveys the blood in its return from every part of the body to the heart; like the arteries they consist of three layers an external or cellulo fibrous, a middle or fibrous and an internal or serous layer. They resemble arteries with the exception that they do not possess elasticity

and from their having valves which are
intended for the purpose of preventing
the retrocession of the current of blood,
they are semilunar in form, resembling
very closely those of the aorta and pul-
monary artery; sometimes we find
only one, more often two
Wounds of veins are of far more serious
nature than those of arteries, owing
to their being more liable to inflammation
Veins have been divided by anatomists
into deep and superficial, the deep veins
are those which convey the blood from
the deep structures, and are accompa-
nied by arteries; the superficial
are those which conveys the blood from the
more superficial portions, the fascia &c. and a

are not accompanied by arteries.

Sinuses are the other division, they are principally situated within the walls of the cranium; they are formed by a duplicature and dipping of the dura mater. Nature has provided this means for the return of blood from within the cavity of the cranium in order to prevent compression which would necessarily be produced by the expansion of veins located in the neighborhood of that very delicate and finely wrought structure the brain.

Before leaving the anatomical description of the different organs constituting the vascular system, I must not forget to at least make mention of the Capillaries; these are small minute,

vessels, intermediate between the arteries and veins; it is [illegible] these vessels that the arteries end and the veins begin. They are of the same diameter throughout and are distributed through every part of the body; they are so numerous and closely interwoven, that the finest needle cannot be introduced beneath the skin without wounding them. Such Gentlemen is the Anatomy of the Heart, Arteries, veins and capillaries.

I will now endeavor in Conclusion to make a few observations on the blood; What is the blood? The blood is the vital circulating fluid, found in the different organs which I have endeavored to describe;

Whilst in the arteries the blood is of a florid

red color, it is then called arterial or red blood; when returning through the medium of the veins it is of a dark purple hue, owing to having lost the major part of its oxygen. In one thousand parts of healthy blood according to the analysis of different Chemists there is three parts of fibrin, one hundred and thirty of red corpuscles, eighty parts of the solid constituents found in the serum, and the remainder of water. These proportions though they may not be perfectly exact are generally admitted to be a very near approximation to correctness; now any marked deviation from the above named natural proportions would necessarily produce some morbid action or condition of some Organ or tissue of the body; as the serious and often fatal effects

of hyperemic conditions, or the sometimes slower but scarcely less serious effects of anemia.

Every portion of the organs or tissues of the body receives their due supply of material for growth and nourishment from the blood through the medium of the circulation, nature having endowed them with the property of appropriating to their own growth from this great source.

The effete matters in the system are taken up in the circulation and thrown off or secreted by organs intended by nature for that purpose, as illustrations we have the urine secreted by the kidneys, the perspiration by the skin, &c.

The different juices intended by nature for

the purpose of aiding in digestion or assimilation, as the Saliva, gastric juice and the tears, the Cerumina in the ears are secreted from the blood by the different organs and glands intended by nature for that purpose; the spermatic fluid in the male and the ovule in the female in which lies dormant the future being are also secreted from the blood.

Nervous influence no doubt acts a very prominent part in ~~the~~ directing the different depositions from the blood to the seperate places in which they are deposited, as we always find accompanying the arteries a nerve cord which acts the part of indicator, directing it in one place to deposite bone, and in others

tendon or muscles or whatever may be wanted to build up or keep in action the grand and complicated machinery embodied in the wonderful structure of man; for instance divide the nerve accompanying some artery going to supply an organ or part of the body, we notice in a short time the part atrophies and in great measure its functions cease, I think that the atrophy would indicate that there was either no deposition of new particles or that absorption was going on more rapidly than deposition, owing no doubt to the will not being able to direct the deposition in consequence of its non-communication with the part necessary to be supplied, but, as soon as

the communication is re-established (which nature nearly always accomplishes without part of the nerve is entirely removed) we find that the part gradually assumes its natural size and function.

I have now gentlemen concluded all that I have to say on the foregoing subjects; I have endeavored in as brief a manner as possible to give what I know on a subject of so much importance to the anxious searcher after truths, of incalculable benefit to the practitioner of the noble art of healing, and an indispensable requisite to the Surgeon.

In the study of anatomy there is a wide

field over which the mind can wander and find a pleasure and benefit in searching out truths presented to the gaze by the hand of nature; to my mind there is no part of the study of anatomy of more interest and importance than that relating to the vascular system.

The regular movements of the heart by its contractions aided by the stimulus of the blood in accordance with the peculiar structure and arrangements of its fibres, the valvular arrangements with the whole systematic arrangement of the auricles and ventricles, leave where there no other acknowledgments to point with majestic awe to that great creative power who in the begining

Created man and gave him power over
all the other animals.
In this hasty and brief treatise I have
not attempted to present to your con-
sideration any new theory, as my sub-
ject at this late day would hardly
admit of it, but I have been con-
tent as best my ability would permit
to present to you those truths learned
at your hands and from the writings
of men eminent in the profession, many
of whom have long since gone to receive
the rewards of an honored and well spent
life; which I hope I have appropriated
with benefit to myself.
In presenting this to your consideration
it is certainly not without a feeling of

diffidence; Should I be so fortu-
nate as to receive at your hands
the license with the command to
"go forth and heal the sick," my aim
at least shall always be to uphold
the fair fame and proud position
of my Alma Mater.

An
Inaugural Dissertation
On
The Science of Medicine
Submitted to the Examination
of the
Provost Regents and Faculty of Physic
of the
University of Maryland
for the
Degree of Doctor of Medicine
by
T. Smith Hotton
of Maryland
A.D. 1860

The Science of Medicine

In taking a cursory view of the past and glancing at the many sciences which have arisen in the diferent ages of the world to startld them with their usefulnes, none in our estimation has been of more importance or has exerted a more beneficial influence upon mankind than that of Medicine.

Tracing it from its earliest infancy in the days of Esculapius up to the present time we cannot but be impressed with the advantages which have

accrued to the human fam
ily in the alleviation and
cure of those manifold disea
ses to which it has been in
every age and locality liable.

In importance and ma
gnitude, in depth of rese
arch and complicity it
has no equal among its
sister sciences however
important. For though it
is a science within itself
it is a compound of many
important scuences, starting
out with Anatomy for its
foundation which reveals
to us the stoucture of the
many organs which con
stitute the human body.

a knowledge of which is of primary and special importance to the physician and surgeon, as without it the former would be at an entire loss in his attempt to form a correct diagnosis of the many structural diseases to which the human body is liable. To the operative surgeon this knowledge is of still greater importance. as without it in his operations he would be like a mariner without chart compass or star to guide him, liable to be wrecked at any moment or what is still worse endangering

the lives of those intrus
ted to his care.

Presuming that every
one desirous of becoming
an accomplished physician
or surgeon has acquired
a correct knowledge of
anatomy, he may then
be introduced to its equ
ally important sister
science Physiology. In
the investigation of which
a wide and interesting
field is opened to the
student, for here he is
made acquainted with
the healthy functions
of those organs with
the structure of which

anatomy has already made him acquainted.

This knowledge of the various organs and apparatus of the human body in a state of health is indispensable. without it the physician would be at an entire loss in his endeavours to judge of them in the disordered conditions to which they are constantly liable. possessing this knowledge special Pathology would open up a new field to him where like an open book he would be enabled to read the cause and

effect of disease, and this would lead him to a perusal of the Principal & Practice of Medicine, where the history of diseases the symptoms by which they may be recognized, also the mode of treatment and cure which is the whole end and aim of the science. But before we can fully comprehend the treatment a knowledge of the remidies by which it is to be effected is necessary. Materia Medica and Therepeutics will furnish us with the

history and effect upon the system of all the remedial agents. While Chemistry develops the constitution of all the natural and the mode of preparation of all artificial ones.

With this knowledge the science of medicine is open to us in all its beautiful proportions. Anatomy and Physiology forming its foundation while Pathology Principals and Practice. With Materia Medica and Therapeutics. Chemistry. Surgery. Obstetrics &c. are all like

pillars to the glorious fabric giving beauty and proportion to its parts.

Then here we have the science of Medicine starting out to be a science within itself, and yet we find it a compound of many important sciences — which by the aid of those noble men who have interested themselves in the welfare of their race — they have all been absorbed and made subservient to the perfection of this one great science to which

to possess and enable him to avert the hand of death he is morally culpable of murder. This alone should impress upon him the importance of endeavouring to acquire that knowledge which would fit him for every emergency that may arise in the practice of his profession. Neither must he think as he goes forth from the walls of his Alma Mater that a life of ease is before him, for observation and the experience of others should impress

it upon the mind of
every one. That however
agreeable and pleasant
the study is, yet the pra
ctical part will necessarily
be full of cares, labors, and
trials. Yet as he has

"Enrolled himself gainst fell disease and pain & death
To wage a dubious war, to raise the weak
The low and fainting mortal to restore
To happiness and health, to give such joy
As saints in heaven might envy when we snatch
The sinking parent from the arms of death.
And give him rescued to the warm embrace
Of his fond Children and his faithful wife
Yet trembling lest their joys again decay
And smiling tearfully."

He must
look to his own conscience

for the reward and while it is his duty to render his profession honorable both by the pecuniary benefits which he derives from it and from the charities which it affords to those who are unable to pay for its indispensable services.

As we go forth from the walls of the University of Maryland and from the sound of those voices which have for the last three sessions uttered for our benefit those words of instruction and advice. We will ever remember with gratitude those great

truths and admonitions which have been so forcibly impressed upon us, and pledge ourselves in view of the great importance of the obligations which the science of Medicine imposes on its votaries, to do every thing in our power to advance its interests.

Fully impressed that if dishonor should be heaped upon the profession which sometimes is that it is not the profession which merits it, but those who have assum-
ed its duties and -

responsibilities without
capacity or knowledge
to fit them for that
high and holy calling
which in the language
of one of the early
professors of the Medi
cal department of the
University of Maryland
"Should rank its owner with the truly great
And next to God the patron of mankind"

An

Inaugural Dissertation

On Jaundice

Submitted to the examination

of the

Provost Regents and Faculty of Physic

of the

University of Maryland

For the

Degree of Doctor of Medicine

by Henry C Edelen

of Maryland

A D 1860

Jaundice

There are few diseases, the nature and morbid relations of which have occasioned greater diversity of opinion than jaundice. The disease is very easily recognized but often it is difficult or impossible to discover the true cause of it. It is characterized by a yellow color of the skin of the eyes and of the urine which will communicate a bright yellow tinge to white linen. A white pale fecal evacuations is a symptom but not a constant one. The well known yellow color of the different tissues and urine is due to the presence of bile or its coloring matter in the blood and on the contrary the deficiency of color in the fecal evacuations is due to a want of bile in the usual quantity

Jaundice generally approaches with languor, depression of spirits, slight rigors

with uneasiness, tension or weight at the praecordia; with flatulence, borborygmi, sometimes nausea and vomiting; or with cricky pains, disturbed bowels, and headache. The condition of the bowels is variable, being sometimes relaxed but more generally constipated and the odour of the evacuations is more offensive than natural. In some cases every object seen by the patient seems of a yellow color. Dr. Mackintosh states that he has seen several cases in which this circumstance was noticed. As to the cause of this morbid vision, if I may so term it, there is some difference of opinion; some ascribing that the humors of the eye are tinged, whilst others think it is only a morbid affection of the nerves supplying the eyes I am inclined to accept the former as the correct theory. It has long been a question among physiologists as to the manner in which

The coloring matter of the bile circulates in the different tissues and kinds of the body. One opinion is, that the bile, after being secreted in the liver, is absorbed and [illegible] the circulation and so conveyed to the surface and other parts in which it is visible

Another theory is, that the bile is not formed in the liver but in the blood, and that the function of the liver is to take away the bile as it is formed in the blood. Jaundice results when from any cause the liver fails to perform its depurating function. I was disposed to believe that the latter was the most rational theory until I heard a clinical lecture on a case of jaundice by Prof. Chew who thinks that the disease may result in either of the ways above mentioned.

The predisposing causes of jaundice are numerous. Mental excitement either of a pleasant or unpleasant nature acts as a

powerful causes, but an indolent mode of life and sedentary habits with a full stimulating diet and habitual constipation are the most common predisposing causes

The exciting causes are either such as prevent the free egress of bile from the liver or stimulate it to an excessive secretion. Sudden and powerful emotions of the mind, a heated atmosphere, the intemperate use of spirituous or fermented liquors, a large and indigestible meal, pressure exerted in the transverse Colon and the pressure of a gravid uterus may all be the exciting causes of an attack of jaundice.

The essential nature of the disease consists either in some impediment to the natural flow of the bile or in a super-abundant secretion of it.

There are many morbid conditions of the liver and of the organs adjacent which

may act as causes of jaundice, but it is better to classify them under as few heads as possible. I think they can be comprised under the four following divisions
First obstructions arising from diseased conditions of the liver and its appendages
Secondly obstructions arising from biliary calculi or other morbid conditions of the bile. Thirdly that resulting from pressure of enlarged contiguous viscera. And lastly from a diseased condition of the duodenum.
Jaundice arising from diseased conditions of the liver or its appendages will be attended by symptoms peculiar to each disease in addition to those which indicate an impediment to the free escape of bile
Jaundice may be a consequence of any form of inflammation of the liver, but it is said to be of most frequent occurrence when always results from that inflammation

In almost every case of jaundice from inflammation or abscess of the liver, the nature of the disease is easily recognised. The symptoms of hepatitis are well marked particularly the pain and tumefaction in the region of the liver, the scanty dark urine and pain in the shoulder. The disease often results from simple congestion of the liver and generally occurs in individuals of a bilious temperament, who live luxuriously and intemperately or who do not take sufficient exercise. Several authors have denied that jaundice results from ~~disease~~ or spasm of the ducts, but I think that the weight of testimony is on the other side. Andral and Bourdan believe that the disease does result from spasm of the ducts and to this cause they refer those cases which are consequent on mental emotions. The principal characteristics of this variety of jaundice are its sudden appearance

and short duration. The line is seldom deep being generally of a crimson or pale yellow and there will be no febrile action.

When jaundice results from inflammation and obliteration of the ducts and gall bladder the patient will be observed to have fever, dry skin and nausea and the stools are without bile. I will now speak of the disease as it arises from biliary calculi.

It has been thought by some persons, that a highly vitiated or insipated state of the bile was almost the sole cause of jaundice, but I think it arises much oftener from other causes. In some cases particularly after any thing which is calculated to cause great depression of spirits or mental excitement, and torpor of the bowels; the stools are noticed to loose their natural color and the skin to become of a dusky yellow line. Under the operation of a mercurial

cathartic, the patient discharges a quantity of dark viscid matter of sufficient tenacity to be drawn out into into threads: after this the patient is much better, the cooling matter of the bile is removed from the skin and resumes its natural place in the fecal evacuations. Such cases may very reasonably thought to result from a vitiated condition of the bile as in the autopsies of such cases. The bile has been found in the gall bladder of the same hitchy tenacious character.

Biliary calculi are without doubt a very frequent cause of jaundice, but they do not always give rise to it when they are present, for Morgagni reports nineteen cases in which he found calculi in the gall bladder, and in not one of these cases had there been any symptoms of jaundice observed

I am inclined to think that is only when the calculi are impacted in the bile ducts

that jaundice results and if the gall bladder itself is nearly filled with the calculi

The presence of a calculus does not always cause constant pain, but it is generally at considerable intervals that the pain is experienced and it is often mistaken for pain in the stomach. They may remain for some time in the gall bladder without causing any perceptible lesion, but that there is not perfect freedom from danger has been proved by the examinations of morbid anatomists some of whom have found the mucous lining of the gall bladder in a state of ulceration, whilst others have found a general thickening of its coats and disorganization of its whole texture. The number of calculi found in the gall bladder after death is sometimes very great. Morgagni is said to have taken out of one body 3646 a number not altogether incredible and appears almost impossible

that they could be contained in the gall bladder
The size and form of these calculi are variable.
In a few instances they have taken the shape
and attained nearly the size of the gall bladder,
but generally they are from one eighth to
one half inch in diameter of a polygonal form
and the sides are often flattened as if from wearing
or pressure. There are three varieties of these
calculi; the Cholesterine, Bilitic and
Inspissated bile calculus.
Cholesteri. calculi are not so frequently
met with as those of the second species;
They are white and have a crystallized shining
and laminated structure, but occasionally
they have a tinge of brown owing to the fact
that the colouring matter of the bile is
interspersed through them
The Bilitic variety, so named from its
colour which bears a strong resemblance to honey,
is of more frequent occurrence than either

of the other varieties. The calculi have always a poligonal shape which is due to the mutual pressure as there are always several of them existing at the same time in the gall bladder. Their outer surface has a soft feel and when they are broken we will see a thin outer crust composed of crystals of cholesterine, the nucleus has the appearance of dried honey and consists of inspissated bile. The inspissated bile calculus consists of inspissated bile alone which will distinguish it the other varieties which contain cholesterine. Many of the circumstances which I have before mentioned as predisposing causes of jaundice, are found to favor the formation of calculus

I have not seen a case reported in which a very large calculus passed through the ducts into the intestinum ileum. They are very elastic and can be dilated to a considerable extent. Nature has provided

another method by which a calculus may be discharged when it is too large to pass by the natural channel; it is by the supervention of adhesive inflammation between between the gall bladder or its duct and the duodenum, perforation of the intestine taking place the calculus passes out through the bowels

Jaundice may be supposed to be the consequence of calculus when the attack is sudden and attended with acute pain in the epigastrium or shooting towards that part from the right hypochondrium, particularly if it be accompanied by vomiting occasional rigors or profuse perspiration without any apparent febrile action or increased frequency or force of pulse. Frequently the pain precedes the jaundice, returning perhaps with great severity for several successive days.

It is acute occuring in paroxysms and is very probably as severe as any to which suffering humanity is liable. The rigors which occur in jaundice differ from those which take place in inflammation in regard to the period of their occurrence as the chill in jaundice rarely precedes. The pain out is felt irregularly during the paroxysm as the calculus is propelled through and distends the duct. The diagnosis will be materially assisted by a careful examination of the pulse: when simple irritation exists it is not much accelerated or harder than in health, but when we find it becoming quicker and harder we have reason to fear the supervention of inflammation. Disease of the adjacent organs particularly the formation of scirrous and other tumors in the pancreas pylous and mesentery involving or pressing on the duct, together with feces impacted in the

caecum and colon are frequent causes of jaundice. The gravid uterus is also a cause of jaundice. All of these causes act by making pressure on the common duct and preventing a healthy flow of bile These causes are difficult and often impossible to recognise during the life of the patient and can only infer the nature of the cause occasionally from the action of medicines as when a case has been relieved by simple purgation we may infer that it depended on feces impacted in the caecum or colon. Viscid mucous adhering to the duodenum may have the effect of closing the valve like opening of the ductus communis, thereby preventing the escape of bile from the liver.
Such a cause may be reasonably assumed when the disease makes its appearance suddenly and without and preceded by

torpor of the bowels.

The prognosis in simple uncomplicated jaundice is generally favourable but varies with the age and constitution of the patient being much more favorable in young persons of vigorous constitution than in those who are debilitated by old age or any defect of constitution. In An unfavorable or very guarded opinion should be given when it occurs after the suspension of the menses, or in those who have been habitual drunkards, if it follow the continued operation of a mental cause as fear grief or despondency or if a colliquative form of diarrhoea supervene, or if it be attended by the vacuation of a dark grumous matter both by the bowels and by the mouth.

There are few diseases which require more good judgement and discrimination

on the part of the physician from the
medicines which have been making
It proceed in different cases from so
many different pathological states
great attention and practical skill
are necessary to ascertain the morbid
conditions and peculiarities of a case
and to determine whether its removal
is possible and if so what remedial
means should be employed to fulfil the
indications. Jaundice frequently results in
hot climates from too abundant a secretion
of bile when there is no evidence of its
obstruction; such a condition is seen
in the common bilious remittent fever
of our country and is dependent on
increased activity in the circulation of the
liver. This is best treated by moderate local
depletion by cups or leeches and a cooling
diaphoretics Nitrate of Potash, or James's

powder and an alkaline solution composed of Chlor Potass. Soda Bicarb Spts of nitre and water with the addition a little syrup and aromatic water These remedies with proper attention to diet will be all that is required in such cases. Jaundice from Hepatitis is of frequent occurrence. When the attack is slight and is attended by little pain and when there is little fever with a pulse rather oppressed, local depletion from the affected region and the use of diaphoretics and alkalies will generally remove the disorder. But when the bowels are constipated other means will be required Ad o. containing Hydrarg Sub Mur grs x combined with pulv Ipecac grs iv and followed in six or seven hours by Sulph Magnesia ʒi and Rochele Salt ʒi will be found to give great relief to the symptoms.

the application of a flannel over the liver saturated with warm oil of Turpentine and the warm bath are remedies which have been highly recommended.
In the more acute cases when we see high fever intensely deep jaundice quick pulse dry tongue, flushed face and scanty dark urine; the treatment should be actively antiphlogistic. I would employ general bloodletting to an extent sufficient to make an impression on the pulse, followed by full doses of calomel and Pulv Dov and at night a dose of gr 3 Ext Hyoscyam Saline aperients antimonials and diaphoretics are very efficent remedies in such cases. After the acute symptoms have been subdued, the use of the nitro muriatic acid both as a bath and internally has been highly recommended as have also the other mineral acids as tonics internally.

In cases occuring from congestion of the liver the treatment required is very much the same as in those results from slight inflamation. In these cases the liver is more or less enlarged and although there can be little expectation of a permanent restoration of the organ to its functions whilst the obstruction which caused the congestion continues; deobstruent and saline purgatives Bi carb potash & Ext Taraxicum and the application of warm turpentine to the abdomen will generally be found beneficial. Iodide of Potash has also been recommended in these cases.

When the symptoms are such as to induce us to believe that the disease arises from biliary calculi, our chief reliance must be placed in that great alleviator of suffering, Opium, either alone or with Tart Antimony. Belladonna or

Hyoscyamus may be sometimes used with advantage instead of opium. Chloroform another agent which I think would facilitate the passage of a calculus and very greatly mitigate the pain. Its advantage but most probably mischief would result from the use of mercury in these cases When the obstructions result from congestion inflammation or obliteration of the ducts in some part of their course from malignant disease of the liver such as we frequently see in drunkards, remedies can be of very little avail, Palliative remedies should however be employed.

In a case treated by Prof Frick in the Bath Infirmary sometime during the spring of 1859 supposed to be due to obstruction about the duodenum he ordered Hydrarg Protochlor gr ss half grain doses every 6 hours which was continued for 8 days. and five days

he gave him Tinct Ferri Mur gtt xx three times a day under which treatment he continued to improve until he left the house

In the case of Bath Turney who came into the Infirmary some time in Sept 1859 very much discoloured by jaundice and her urine containing bile in considerable quantity and in this case there was if I recollect some enlargement of the liver Prof Shaw ordered a Pill containing Mass Hydrarg [illegible] gr i to be given three times a day and also a table spoonful every four hours of a solution containing Bicarb Potass ʒii Ext Taraxicum ℥ʃ Aqua Mentha ℥ʃ and Aqua ℥v and [illegible] she complained of tenderness over the hepatic region and was cupped. next morning her bowels being too freely moved she was ordered Chalk Mixt after every operation and pills were discontinued and the Dr

ordered the following prescription. Mag Kg. ar gr xii
Creta Spt. ʒ ß. Sach Alb. ʒ ß. Pulv Cinnamomi gr vi
to be divided into six powders and one to be
given every four hours alternating with
the solution. These were continued until
salivation was produced and the solution was
also stoped at that time. Nitro Muriatic
acid in 10 drop doses every four hours and
also Ext Taraxicum. a few days after
the acid and taraxicum were discontinued
and a table spoonful every 4 hours of the
following solution was ordered.
Sulph Magnes ℥i Carb Magnesia ʒii
Aromatic Spts Ammonia ʒ ß. Simple Syrup ℥ß
Aqua dist ℥vii. which was continued
for about two weeks with great benefit at the expiration
of that time Dr Chew ordered a pillo
Fel bovis grs x three times a day, and other
medicines were discontinued. After this she left
the house very much improved in health

An

Inaugural Dissertation

on Pneumonia

Submitted to the examination

of the

Provost, Regents, and Faculty of Physic

of the

University of Maryland

for the

Degree of Doctor of Medicine

by

Edwin William Lee, Cato

Pneumonia.

The frequency and severity of pneumonia, is sufficient to rank it among the most important of diseases. There is hardly any disease the nature and pathology of which is better understood, and perhaps there is none about which, there is a greater discrepancy of opinion, as to the best mode of treatment.

By the term pneumonia is now universally meant, an inflammation of the parenchyma, or substance of the lung: consisting of bronchi cellular tissue, nerves, lymphatics, and the minute ramifications of the arteries and veins. It has received different names corresponding with the different parts of

the lung which it involves. That affecting both lungs is called double pneumonia; that affecting one lung, or one lobe is termed lobar, that affecting one or more lobules is known as lobular, that affecting the vesicles, vesicular, and that affecting the intervening tissue, intervesicular. When the pleura is considerably involved it is then known as pleuro-pneumonia; and when it is associated with an adynamic or low condition of the system, it is called typhoid pneumonia. These are the varieties which the disease occasionally assumes. Some of them are seen principally in children

which the lobar is that form which most commonly attacks adults.

Pneumonia has three distinct stages, generally well marked, and corresponding with the intensity and progress of the inflamation going on in the lung. The first is that of engorgement by which the lung is completely filled or gorged with blood. The cause of this state of things would seem to arise from irritation applied in some form or other to the capillaries of the part. As a result of this, contraction of these vessels take place, and the flow of blood is very much accelerated through them; the increased vitality brings

about a morbidly increased nutrition, the consequence of which is a change in the Capillaries so that they soon become dilated. The red corpuscles, now begin to adhere to each other, and the sides of the vessels: the circulation becomes more and more languid and finally stagnation ensues completely.

In this condition the lung is less elastic, and heavier than natural, but notwithstanding its increased density, it will still float on the surface of water, because the air-cells, although greatly obstructed by the pressure of the distended vessels, are not entirely obliterated, but still contain

a small quantity of air. If the affected part be cut into it has a dark red colour, and it exudes freely a reddish, turbid, and somewhat frothy serum. Its cohesion is greatly diminished, and its texture is now very much more easily broken down than when in its normal condition.

This stage of the inflamation very closely resembles the congestion which happens at the close of life mechanically; but as that is the result of gravitation it will always be found in that part of the lung which is most dependant, generally in the back part. Now an inflamatory engorgement may occupy any portion of the lung

its situation will in most case, be sufficient to point out the true condition.

As the inflamation advances other changes take place, and the second stage is ushered in. To this Laennec has given the name of hepatization, because of its great resemblance to the liver when cut into. The lung in this stage is still red or greyish red, and from the cut surface there flows under pressure a reddish fluid, but less in quantity and more consistent than that of the first stage. It now no longer crepitates when pressed, the air-cells have become obliterated and when thrown

on water it sinks. But although it is more solid and its specific gravity is greatly increased, owing to the exudation which is poured out in its substance, its cohesion is very much diminished and its texture can be broken down with but very little resistance, in consequence of the softening of the areolar tissue which holds the grains together. Andral called this condition not inappropriately red softening. On the cut surface of hepatized lung may be seen a great number of minute granules closely crowded together: this is the result of the exudation which insinuates itself among the ce-

-mentary tissues, and which fills and distend the air-cells, giving rise to the granular appearance.

What is really the cause of this exudation of the liquor sanguinis is not certainly well understood. Dr Bennett of Edinburgh attributes it to depend upon a modification of the attractive and selective power which the tissues possess of drawing certain matters from the blood to carry on the process of nutrition; he believes the attractive power is greatly augmented, and the selective power equally diminished.

In the third stage or that of purulent infiltration, the lung undergoes an alteration in colour,

instead of a reddish or mottled, it now presents both externally and internally a greyish or yellowish colour. Laennec called this grey hepatization, and the grey softening. The lung is now completely infiltrated with purulent matter, and is much softer than in the second stage so much so that by the slightest pressure it becomes almost a purulent fluid. There is another condition of this stage, but according to the best authorities is of extremely rare occurrence.

This is abscess. Andral has seen it but once, as a consequence of pneumonia; Laennec only five times in several hundred examina-

tions. Chomel but three times in twenty-five years experience, and Dr Chew has observed only two cases. These facts show that it happens very seldom: and in the few cases which have been recorded some of them may have resulted from a slight pressure while making an examination, so that a cavity may have been formed, and purulent matter poured in resembling a circumscribed abscess recently formed. Dr Watson thinks that such a mistake might be very easily made. Gangrene sometimes results from pneumonia, but its occurrence is also very rare. It is known by its black or greenish black colour

and by the fetid offensive odour and also by having the appearance of an eschar produced by nitrate of silver.

These are the three stages which mark the onward progress of the common idiopathic inflammation of the lung. They are described as separate and distinct conditions, but do not often exist as such. They are generally more or less mingled all three existing in the lung at the same time.

The inflamation may commence in the inferior lobe and gradually extend upward to the superior lobe. That which was only engorgement becoming hepatized, and this again

passing into the stage of purulent infiltration. The above there would be simply an engorgement of the vessels of the part presenting a deep red colour showing the first stage. Lower down the part would be solidified, it would not crepitate, its density would be increased and it would have a greyish red colour evidently showing it to be in the second stage. Still lower down it would have all the characteristics of the third. Although the line of demarcation could not be accurately defined, because the one stage so gradually merges into that of the other, still an approximation could be made which would distinctly separate

the one from the other condition.

That part of the lung which is most likely to be affected is the inferior lobe from which the inflamation spreads upward; and the right lung is more obnoxious to the disease than the left. Why this is so is certainly not Known; but the frequency of it occurrence has been sufficient to establish the fact. It is said also, that men are more subject to the disease than women are, and that the age or period of life most liable to an attack of pneumonia is when the body has reached its full height and is growing laterally. Whether this be true or not no period of life is entirely

the disease. There are certain other affections with which it is likely to be associated and which are thought to predispose to it. Such are bronchitis, phthisis, hooping-cough &c. Diseased, or insufficient valves in the left heart, might cause it by preventing the organ from emptying itself thereby causing pulmonary congestion. But by far the most frequent cause is exposure to cold and damp, when the skin is in a relaxed condition.

Inflamation of the lung may terminate like all other inflammations affecting similar tissues. It may go no farther than the first stage - that of engorgement.

The capillary obstruction may be overcome, the circulation equalized and the patient suffer no farther inconvenience. Or an exudation of the liquor sanguinis may take place, through the dilated vessels filling up the substance and vesicles more or less completely with coagula. If the disease advances still farther, it passes into the stage of purulent infiltration from which it is said patients very rarely recover.

These being the anatomical characteristics of pneumonia, what will be the means by which we shall become aware of its presence? What will indicate the existence of

such a condition of things? The
the general symptoms and physical
signs! The first intimation in
most cases is a decided chill
followed by fever, with flushed
cheeks, pain in the head difficult
respiration cough, and pain
more or less acute in some part
of the chest. The pain is greatly
increased by taking a long breath,
and in some cases only made sen-
sible by doing this. There is also
a feeling of constriction about
the chest as though something
was pressing firmly around it
Blood drawn, coagulates very
strongly, is cupped, and presents
the buffy coat. The urine is

generally scanty and high colored, and the skin hot and dry. The pulse is full and strong and ranges from ninety to one hundred and twenty in the minute. The sputum is also a very characteristic symptom; it is of a rusty brick red colour, and very viscid, so much so, that the vessel which contains it may be turned almost upside down without its being detached. This however is not generally seen at the commencement of the disease for then it is only mucus containing very little else but usually about the second or third day it makes its appearance and is then almost pathognomonic

of pneumonia. It is composed of mucus and blood thoroughly mixed and mingled together. Greatlen-acity of the sputa denotes that the disease has passed the first stage: and the expectoration of a fluid like plum juice or liquorice water indicates that it has reached the third stage, and is a very unfavour-orable symptom. There is another symptom which is a constant at-tendant upon the disease, which I have never seen mentioned by any author but I have observed it always. I suppose the reason that it has escaped the notice of medical men, is because the patient is generally awake when seen by the physician;

and it occurs only when the patient is sleeping. It is a peculiar grunting moan at every expiration, - rather hard to describe but easily recognized when once noticed. If the patient be roused up in this condition, the moaning ceases, and the respiration is only laboured. I should consider this with other symptoms a strong indication of inflamation of the lung. But neither any one, nor all of the general symptoms together, could enable us to say with absolute certainty that a person was labouring under pneumonia were it not for the physical signs. These are by far the most important,

and in many cases the only means by which a correct diagnosis can be obtained. The first of these signs is crepitation - indicating the first stage of the inflammation. It is supposed to depend on the bursting of minute bubbles of air in the liquid which is begining to be poured out in the air-cells, and minute ramifications of the bronchi. Dr Williams supposes it to be caused by the pressure upon the air-cells and bronchi by the distended blood vessels, bringing their surfaces together but not entirely preventing the passage of air, so that small portions of it, passing through these separate

their sides, & nice are stuck together by a viscid secretion, and giving rise to the characteristic crackling.

This auscultatory sign is said very much to resemble the friction sound, produced by rubbing between the finger and thumb a lock of hair near the ear; or the minute crackling of a handful of salt thrown on fire. If the ear be applied to the chest over the seat of the inflamation, in the stage of engorgement; unless it be too deeply seated, and surrounded by healthy lung, this crackling sound will be heard. But it does not continue very long, for unless the inflamation

quickly terminate in resolution, the second stage is soon reached and then crepitation is no longer audible. After the part has become solidified other signs are developed, which are as conclusive of this condition, as crepitation was of the first. These are bronchial respiration, bronchophony, and dullness on percussion. The first two of these sounds arise from the same cause; both, the blowing sound of the respiration, and the bronchial voice are always present in the lung, but in health they are arrested by its spongy texture; as soon however as the part becomes solidified it

serves as a medium by which the sound is conducted to the ear of the listener. Now if there is intervening between the hepatized part and the walls of the chest sound, healthy lung, these signs would be very much modified, or quite absent. This would also diminish the dullness on percussion in proportion to the thickness of healthy tissue; and it might be so great as to mask almost entirely the real condition of the lung. This would be most likely to happen in lobular pneumonia. In such cases we should have to rely upon the general symptoms for our diagnosis. The absence of the chloride

of Sodium in the urine, is now a fully well established sign of Pneumonia. Dr Hughes Bennett considers it a very important circumstance in pointing out the progress of the disease, for he says that the disappearance of the salt from the urine, is an evidence that the disease is still advancing but that its return is a sure sign that the exudation has ceased and absorption begun.

In regard to the treatment, there is certainly much difference of opinion. One class of practitioners tell us that the abstraction of large quantities of blood speedily is the only means by which the

patient can be benefited or life prolonged - another, that large doses of tartarized antimony as practiced by Rasori is the best plan, another that more moderate bloodletting and the more discriminate use of antimony with mercury is by far the safest plan of treatment. And finally, Dr Hughes Bennett declares to us that the antiphlogistic plan is entirely unsuited, nay, actually opposed to the cure, not only of pneumonia, but of internal inflamations generally. This last is in direct opposition to all the well known, and long established therapeutical principles concerning the phlegmasiae &c. It is a vital

pneumonia can neither be averted or benefited by bloodletting. This fact also is true after lymph has been poured out; but it seems to me that in the very beginning of the congestive stage, the exudation might in many cases be prevented, if not entirely, at least to any great extent by a moderate bleeding.

We know that bloodletting is one of the most efficient means of relaxing spasm, - now if the very first phenomena of congestion depends upon the spasmodic contraction of the capillaries of the part a moderate bleeding would certainly prove beneficial by overcoming this, as well as by lessening

the amount of the circulating flu-
-id. I do not believe that general
bleeding is hardly ever resorted
to now, in the second stage of
the disease, neither do I believe that
it would be of any service after
the exudation, except in cases where
a part of the lung was in the first
stage, and the inflamation was
still spreading. And then it would
be better, perhaps to abstract
But as an abortive in the first
stage, with a pulse full and str-
-ong, I have been taught to believe
it an excellent remedy. The great
misfortune in the majority of
cases is that the patient is not
seen until the proper time, or

period when the extraction of blood would be most useful to him has passed, consequently the benefit of the remedy is lost. But there are many cases which would not bear the loss of blood even in a very moderate degree: and these are such as occur in the old and debilitated — such as have a typhoid tendency, in which the general symptoms are those of feebleness and depression. In the treatment of such cases, we should have to combat the inflammation by less active measures: while at the same time we should endeavour to support the sinking energies of the patient. Perhaps

the best plan in such cases would be, after evacuating the bowels with some mild aperient, to put the patient on a combination of calomel, opium, and ipecacuanha; and continue it until a slight salivation was affected. At which it should be withheld or given in smaller quantities or at longer intervals, so as merely to keep up without increasing the specific action of the remedy. If much debility come on, stimulants should be given such as carbonate of ammonia wine, brandy &c at the same time a large blistering plaster to the chest would be very serviceable acting both as a

stimulant and revulsive. Should chronic prostration supervene the most powerful stimulants would be called for, so that in proportion to the debility must be the amount of stimulus. When convalescence was established tonics should be substituted, such as sulphate of quinia, muriated tincture of iron &c - especially the iron, because of its diuretic as well as its tonic properties.

But in the treatment of the common sthenic form of the disease, if the patient was seen in the first stage, with the usual symptoms of fever, pain in the chest, distress with the pulse strong and full it-

would be proper to take blood either by cups or venesection, and enough should be taken to make some impression upon the pulse or to alleviate in some degree the urgency of the symptoms. I should do it, believing it to be the true indication, and with the confident expectation of relieving in some degree the congested state of the vessels. As an adjuvant to this, a combination of, bicarbonate of potash, tartarized antimony, simple syrup, gum acacia, and water should be given every two or three hours. The antimony should be given in small doses, from the one eighth to the one fourth or half

of a grain, at regular intervals so as to keep up a certain degree of nausea without carrying it far enough to excite vomiting, for this would temporarily excite the system and increase the trouble. It is by the production of nausea that tartar emetic becomes such a valuable remedy in controlling acute inflammations. It subdues the action of the heart and arteries, producing cool skin, perspiration, and it promotes absorption by the removal of the pressure from the capillary circulation. If it causes an undue action on the bowels tincture of opium should be added to the solution. This should be alternated

with a combination of Calomel
ipecacuanha, and opium in sm-
all doses. If much debility begin
to be manifest the antimony should
be omitted; but the mercurial should
be continued and pushed to a
moderate ptyalism. When this was
accomplished we might reasonably
expect to see an amendment. If
the bowels were very irritable re-
course might be had to the blue pill,
or mercury with chalk, and finally
if necessary, to the unguentum
hydrargyri. A blistering plaster
should be applied to the front
part of the Chest as soon as the
inflamation begins to subside
but not sooner. Dr Watson thinks

this should be very large to accomplish much. for he says "the patient should have a waist-coat almost or at any rate a breast-plate of blistering plaster. Would not this depend upon the extent of the lesion; If this was large should not the plaster be in proportion: If on the contrary it was small would not a smaller one prove equally beneficial, and give the patient less trouble. Expectorants are often useful in the declining stage of the disease. Of these, the syrup of squill and of Senega may be combined with Tartar emetic and given in doses that will not nauseate the stomach, and thereby prove too

depressing. Should great debility ensue and the vital powers seem to be giving way, with a weak irregular pulse, cold extremities, and a probability of death by asthenia; stimulents should be given, such as carbonate of ammonia, brandy, wine, oil of turpentine and the like in proportion to the urgency of the symptoms. At the same time a light nutritious diet, should be allowed. As improvement progressed, tonics should take the place of the more active stimulents; such as iron, quinine, &c which should be gradually withheld as soon as convalescence was well and permanently established. This

I have been taught to believe is the general outline of the best plan of treatment for pneumonia — The one which offers to the patient the best prospect of relief and ultimate recovery. To this I shall adhere until ample experience proves its inefficiency and fully establishes the superiority of another. There are modified forms of the disease which will require a modified treatment, and this has always been insisted upon by the professor of the practice of medicine (Dr Chew) in regard not only to the treatment of pneumonia but of

every disease that is never to treat a disease exclusively in reference to its name never to be entirely influenced by the mere name of the disease but always take into consideration the general symptoms and the peculiar circumstances to which the patient may be subjected; By Keeping this constantly in mind we shall be enabled to avoid much embarassment in the treatment of diseases, as well as have pointed out to us, the proper remedies for each particular case.

An

Inaugural Dissertation

on

"Pneumonia"

submitted to the examination

of the

Provosts, Regents, and Faculty

of Physic

of the University of Maryland

for the

degree of Doctor of Medicine

by

Henry Louis Perrie Naylor,

of

Maryland

February – 1860.

Since the time of Laennec there
are no deseases which have attrac-
ted, the notice of the profession more than
those of the chest; and of the mul-
titudinous number which swell
the category of that region of the
human body next in importance
to "Phthisis" is the subject I have
under consideration.

Pneumonia is a
desease which has for its seat of mis-
chief the substance of the lungs,
which consists of cellular tissue
nerves, bloodvessels, air-cells &c &c.
There are three well marked and
very constant conditions of the
lungs corresponding to different
degrees and periods of its inflamation
which modern science has disclosed
to us by auscultation or the

employment of the stethoscope, which I will endeavor to describe in the order and succession in which they take place.

The first stage or condition, that of engorgement the inflamed portion of the lungs exhibits a brown mottled or violet color, which forms a strong contrast with the pale or gray color of the healthy part. It is of a firmer texture and heavier than in the sound state, retains in some degree the impressions of the fingers, is crepitous; though less so than in the healthy condition, and we discover there is more liquid than air in the cells.

When the engorged portions of the lungs are laid open with the knife, a large quantity of a reddish serosity runs out, and the internal structure exhibits a livid red appearance. If portions of the engorged lung are pressed until all the fluid has been squeezed out they become as elastic and crepitous and of the same color as the healthy part if air be blown into them. (Eberle).

Simple engorgement appears to be the result of the weakest grade of acute inflammation, and may even arise mechanically from sanguineous congestions during the last moments of life or in arterial wounds. (Condral)

When the inflamation is intense and terminates in the above engorged condition; the structure of the lung is altered; its cohesion is diminished; it is more easily torn; more in that respect like the spleen - and hence the term splenization of the lung has been given to this stage as hepitization has to that which follows it.

To distinguish mere engorgegment by extravasated fluid from sanguineous congestion and engorgement from inflamation we must judge less says Andral, from the color than the degree of firmness of the pulmonary structure.

Hepatization — i. The term given by Laennec and after him most others writers to that condition of the lungs when they present in the second stage of acute inflammation the appearance and consistence of liver.

In this variety of structural change, the lung is still red externally and within; impermeable to air, and is entirely deprived of its crepitous feel under the fingers, and sinks when put in water.

When cut into, a small quantity of a reddish fluid exudes without exhibiting any frothy appearance.

If we examine the incised surface with a lens we perceive that the lung its cellular structure — the pulmonary substance exhibiting a red granulated appearance; and a moderate degree of pressure will suffice to reduce it to a state of pulp. (Andral).

When a lung is hepatized or in other words when impermeable to air, it follows that when the thorax is opened that no collapse will take place; that the bulk of the lung is increased and in fact it is, — for as other organs of the body while in a state of inflamation swell — thus they should not the

lungs while laboring under a similar disorder be likewise affected?- Watson says that the marks of the ribs are often visible on the distended lung.

The hepatized lung is denser and more solid than before, but it is also more friable; more easily crushed and broken; and this results from the softening of the areolar tissue which holds its component parts together. (Watson).

This morbid condition has been called red hepatization, though as Watson remarks this nomenclature is unimportant, provided we remember the

sense in which these terms are employed.

The Third Stage which Laennec denominates gray hepatization or purulent infiltration and which Andral calls gray softening marks a still further progress of inflammation that is going on in the lung; the pulmonary tissue instead of presenting a dense, solid organ impervious to air as in the second stage undergoes an alteration in color; it presents a reddish yellow or straw or drab or yellowish pale color; and when cut into, discharges copiously an opaque yellowish or grayish fluid which is manifestly purulent and almost without

smell. In some cases, the pus does not issue spontaneously from the incised surface, but on pressing the tissues moderately, small drops of purulent fluid are forced out. The more the pulmonary tissues is soaked or drenched with this fluid the more soft and friable it becomes

In this vanity of disorganization, the ~~the~~ pulmonary tissue is softened and readily converted in a greyish pulp by pressure between the fingers. And by gently forcing the finger in any part of the parenchyma in this state, a small opening may be made which soon fills with pus, and which might readily be mistaken for a recently formed abcess.

Though abcess of the lung is ~~considered~~ found by modern observers to be of rare occurrence; it was considered by the ancient writers as a very common sequel of that disease — Laennec only found five cases of pus in the course of twenty years having made during that time several hundred dissections of persons who had died of pneumonia — and one only did he find an abcess —

Andral has met with one case only of real abcess as a consequence of this disease. Gangrene has been given as a fourth stage in pneumonia but it is exceedingly rare termination of acute inflamation of the lungs.

Andral gives an account of two instances of this kind. Cases of that kind are attended with an intolerable fetid breath, particularly during the fits of coughing; and the matter expectorated being of a chocolate color and attended with an offensive smell. Dissection shows us a considerable portion of the lung converted in a putrid mass, containing fragments of pulmonary tissue, of a blackish or violet color.

The surrounding portions of the lungs being infiltrated and partly hepatized. (Ebrle).

I have been speaking of pneumonia as it is apt to affect the whole portion or portions of

both lungs; but the inflammation does not always attack both the lungs at the same time — nay rarely does it attack both — it may be confined to the right or left lung or to certain of the pulmonary lobules — hence the name lobular pneumonia. It is stated to occur oftener in the right than in the left lung, and if we judge from statistics we find that it occurs more than twice as often in the right side than the left and not on both sides together as often as once in eight times.

Having noticed the different stages or degrees which pneumonia is known to take. I next proceed to inquire how we without seeing

what is going on within the chest are able to ascertain the important processes which are there transacted Auscultation or the employment of the stethoscope has of late years attracted much attention, as a means for obtaining a correct diagnosis in pectoral diseases.

A Medical who has paid much attention to this subject has given the following account of his experience in Auscultation in pneumonic inflamation. "As soon as does the pain and difficulty of breathing come on, than the ear applied to the thoracic parietes, recognises a notable modification in the nature of the noise heard at each inspiration, and as the inflamation advances

the noise undergoes fresh modifications, which indicate with more or less precision the situation and degree of the affection." At the ~~time~~ commencement of the disease whilst the lung is in the state of simple inflammatory engorgement, the noise of respiration in the affected part loses its clearness, and is more or less mixed with a dry rattle, which Laennec terms crepitous from the resemblance it bears to the noise emitted by common salt when thrown upon hot coals. It bears also a considerable resemblance to the peculiar noise occasioned by crumpling a piece of parchment" Dr Williams says a pretty correct idea may be obtained by rubbing

a lock of one's own hair between your finger and thumb close to the ear. Laennec calls this crepitant ronchus. Dr Watson would speak of it as minute crepitations; or the crackling of pneumonia.

The presence of crepitous rattle or minute crepitation indicates engorgement or the first stage of inflamation, and so long as it continues, it shows that the inflamation (in a great part at least) has not advanced beyond the first degree. From its greater or less intensity, and from its more or less strong admixture with the natural respiration, we may derive indications of the degree to which the engorgement extends and whether it is passing

into the state of hepatization or otherwise. While the noise of natural respiration predominates over the crepitous rattle, we may conclude that the inflamation is slight; but if the rattle increases, and predominates in its turn, until it completely masks the respiration we may be certain that the inflamation is advancing to the second degree or stage.

At a more advanced period the crepitous rattle ceases to be heard; and if the natural respiration then returns, we know that the disease is subsiding; but if there be no respiratory murmur audible, or if the natural respiration be replaced by another sound hereafter to be described, we may be

certain that the disease is becoming more serious, and that the lung is hepatized. Laennec has established the fact, that in many cases, when engorgement of the lung is succeeded by hepatization, the ear applied to the chest feels the motion of the thoracic parietes, but does not hear any respiratory noise, either natural or pathologic.

In certain cases when the lung is in the stage of hepatization, the noise of respiration does not disappear, but is modified in a singular manner, and is evidently different from the natural kind. It seems as if a person placed near the auscultator's ear breathed through a brazen tube forcibly; there is at the same time

a peculiar resonance of the voice, whenever this kind of respiration is audible.

This modification of the voice has received the name of Bronchophony by Dr. Watson and the modified respiration the appellation of Bronchial respiration.

When bronchial respiration is heard dullness on percussion is usually found to be present. Whilst auscultation of the diseased side affords the signs already enumerated, the respiration of the healthy side is heard with much greater intensity than in the physiological state; — as if it were necessary for the healthy lung to receive a greater quantity of air in a given time, in order to supply the deficiency

of the deceased one.

Auscultation fails to teach us with any certainty of the advancement of the disease into the third stage Such are then the physical signs laid down by such men as Laennec, Andral Watson and Williams which accompany and reveal the successive changes of structure, destructive and reparatory which take place in inflamation of the lungs.

The general signs or symptoms of pneumonia are pain sometimes obtuse at others pungent in some part of the thorax pulse more or less quick and hard according to the degree violence and extent of the local disorder;

Dyspnoea; Cough a peculiar expectoration and fever. The pain in pneumonia is said to exist only when it is connected with pleuritis. (Watson)

It is generally felt on a level with or little below one or the other breast; but may exist in any portion of the thoracic parietes; greatly aggravated by cough percussion or a deep inspiration; also by change of posture. Dyspnoea is almost a constant symptom. Though instances are cited in which no difficulty of breathing was manifested by the patient or discovered by his physician. Patients laboring with inflamation of the lungs find the breathing

more oppressed when they lay on the sound side than when they lay on the affected side.

Cough; The cough in pneumonia is not of much importance as a diagnostic sign, and affords but little information. It is usually dry in the onset, but is soon followed by a copious and peculiar expectoration, which affords in connection with the physical signs already explained a sure indication of the presence of pneumonia

The expectoration of pneumonia when well marked consist of transparent tawny or rust colored sputa - uniting in the vessel containing them into one jelly like mass, and of

such viscidity, that the vessel may be turned up side down and strongly shaken without detaching them from its sides or bottom.

Delirium is a symtom which we very frequently meet with in this desease, and one which requires close watching, as it denotes the imperfect arterialization of the blood by the lungs.

Progrnis. A copious expectoration of a thick uniform yellowish matter, is one of the first, and most encouraging indications of a favorable turn of the desease; when this symtom occurs with an increased flow of sedimentous urine and gentle diaphoresis, we have good ground for predicting a favorable issue

of the disease, more especially if at the same time the oppression and pain in the chest abate, and the cough becomes less troublesome.

When on the contrary, the pain and oppression become more generally diffused throughout the thorax; when the cough is dry or attended with dark or red liquid sputa; when a long with a sense of suffocation and great anxiety, the lips and countenance become livid, and the pulse wift irregular and laboring; and finally when delirium, coma or convulsions supervene, or a sense of coldness is felt in the body, whilst the

the surface is very warm, the danger is to be considered as very great. (Eberle).

The prognosis although is attended with a great deal of uncertainty. Instances of unexpected recovery occur after the most dangerous symptoms have made their appearance; and on the other hand, death sometimes speedily supervenes in cases apparently free from particular danger.

Causes. — Vicissitudes of the weather are among the most frequent causes of pneumonia.

Sudden exposure to cold when the body is warm and perspiring is very apt to induce it.

This is especially the case when the individual is at the time labring ~~at the~~ ~~from~~ ~~under~~ catarrhal attack.

Various diseases are apt to be accompanied with pneumonia and are thought to favor its production. The one in which it most frequently occurs is probably bronchitis; but it is also frequent in measles & hooping cough. Pthisis can scarcely run its course without more or less of it. It is said to be one of the most common inflamations which attend reaction after the collapse of malignant cholera. Of the predisposing causes cold may be ranked among the most efficient.

Hence the disease

prevails mostly in cold countries, and in colder seasons. It is probably as common in cold and dry as in moist climates -

Age and Sex

does not seem to have any influence over the frequency of its occurrence. In the first five or six years of infantile life, the bilious form seem to prevail most commonly. It attacks more frequently men than women, the reason probably being that the former are more exposed to the vicissitudes of the weather and other exciting causes which predispose to the affection. Perhaps the age in which it most frequently attacks persons is from twenty to thirty five.

Treatment; The remidies laid down as the great instruments in the treatment of inflamation of the lungs are Bloodletting, Antimony, and Mercury; of these bloodletting was until a few years considered the chief— when a medical man was called to a patient who was found laboring under the symptoms peculiar to pneumonia his first and great object was to open a vein and allow the blood to flow in a large stream until some sensible sign was made on the system.

And as an auxiliary to the lancet it was the habit to take blood by means of cupping glasses and leeches from over the affected organs.

view the case, and reason seems to prompt us to pursue the course laid down by writers prior to the year eighteen hundred and thirty two.

Here we have inflamation and congestion, and the cause of this congestion is the greater afflux of blood to the lungs than usual - hence the inflamation which is set up.

Now reason seems to suggest to us the propriety of lessening the amount of circulating fluid to subdue or take away this congestion.

But for some cause which have puzzled physiologist to explain bloodletting has seldom been employed since the occurrence

of the cholera in eighteen hundred and thirty two.

Yet I have found that bleeding is of the utmost importance when the disease occurs in persons of a plethoric habit and constitution with a full and bouyant pulse and have seen the happiest results from its free use both general and local in this form of disease. When however the disease occurs in persons of an opposite temperament — bloodletting should never be employed — and its use would only retard his recovery or give an impulse to a speedy death.

Hence the phrase

so common among writers "if you bleed your patient you kill and if you bleed him not he dies".

How careful then to discriminate, and how careful should we observe every case and not in any manner be an instrument to hasten a an early death some unfortunate person who had fidelity enough in our skill to entrust his life Therein -; and from want of sufficient judgment on our part lost it.

Tartar Emetic, given in small doses not sufficient to produce emesis; but to keep up a nauseant effect on the system, acts as a charm in this affection.

It generally brings on a uniform diaphoresis, promotes expectoration and allays the pain in the thoracy almost immediately.

Yet it is only suited to the first stage of the disease and it will not do for us to rely wholly on its powers when the lungs have approached to that stage which we recognize as hepatization.

Mercury is our sheet anchor in inflamation of the lungs when they have become solidified; and should in all cases be given in doses sufficient to make its presence manifest on the system in a short time.

I have seen cases

which recovery seemed almost to be impossible, yield in a short time to the timely use of this medicinal agent.

Purgatives. Although gentle aperients are decidedly beneficial in pneumonic inflammations, yet general experience goes to show that active and repeated purging is more apt to prove prejudicial than useful.

Stimulants. If the pulse continue steady and firm we should wait patiently the effects of the foregoing remedies; but when sunken features, a pallid face, a coldness of the surface, or extremities, a tendency to delirium, and above all a feeble, and irregular pulse

proclaim that the vital pow-
ers are given away, it will
be requisite as in other cases
when death is threatened by
asthenia to administer cor-
dials and stimulant medicines"

Blisters —

We consider of great
advantage in some stages of
the disease and Watson gives
it as his experience that when
the fever is no longer high, and
the skin no longer burning;
but expectoration is still
difficult, the dyspnoea con-
siderable and a sensation of
pain and tightness or oppression
is experienced in the chest,
a large blister is often productive
of very sensible benefit.

Veratria: has been highly recommended of late by some men = who have tested its virtues in this affection — and they say it is peculiar beneficial in promoting expectoration and allaying cough and dyspnoea and other unpleasant con-comitants of the disease; but I have never seen it tried and therefore can-not speak of its virtues or vices.

There are many other remedies which have been claimed by practitioners as especially useful in this disease — among them may named acetate of lead, hydrocyanic acid, digitalis muriate of ammonia, the

alkalies and alkaline carbonates in the earlier stages, and iodide of potassium in the advanced stages, when the lungs remain consolidated, and all fever has disappeared.

Opium. Very minute doses of opium may be used when the emetic plan seems to bring on a diarrhoea; but we should in all cases be very cautious in its administration, and not forget that it is the lungs which is the seat of affection, and do nothing that will retard the due arterialization of blood.

This then concludes what I have to say of the treatment of acute

idiopathic pneumonia.

Different cases require different modifications of it which must be left to the judgment and skill of the practitioner.

Respectfully Submitted.
By H. L. P. Snyder of Md

An

Inaugural Dissertation

On

"Variola"

Submitted to the examination

of the

Provost [illegible]

of [illegible]

of the University [illegible]

for the

degree of Doctor of Medicine

by

[illegible]

[illegible]

[illegible]

This is one of the exanthemfevers. The Term exanthem is employed to designate those acute contagious affection in which an eruption appears on the surface of the body. Each affection of this kind has its specific cause, and cannot, so far as we know be produced by any other cause or causes, in all of these fevers exists as the primary or essential disease, the eruption being a secondary affection and the immediate consequence of the specific febrile experiment under

interrupted by constitutional
idiosyncrasy or adventitious
influences. Each of these
diseases has its determinate
course both in relation to
the duration of its stages
and the succession of its
characteristic phenomena.
They are all communicable
by contagion, and they possess
the power of destroying the
susceptibility of those who
have had a subsequent attack
of the same Disease,
although instances do
occasionally occur in which
this power is more or

less effectively opposed by the system, and in which therefore a second attack is possible.

Small-pox is characterized by an eruptive fever of three or four days duration, succeeded by an eruption which passes through its different stages.

Origin

The origin of the disease is unknown the earliest notice is by an Arabian. it is said to have broken out in the County

at the siege of Mecca in the sixth century and was propagated widely by the wars. Was introduced into Europe at the overthrow of the Gothic monarchy in Spain by the Moors, and into England by the return of the crusaders.

Rhazes an Arabian physician was the first who gave a distinct description of the disease, who lived about the beginning of the tenth century.

Its first appearance in

America was introduced being brought from Cuba to that Country by one of the Spanish expeditions a negro covered with pustules, who was landed on the coast, and from him the disease spread.

Derivation

The word pox is derived from the Latin pocca a bag or pouch or from pochet a little bag. The term small is added to distinguish it from the great pox. The medical term Variola is derived

from the Latin varus, a pimple. Dr Elliotson in the etymology, is [illegible] the disease is a [illegible]

The disease does not appear in all cases alike, it presents three different varieties the Distinct. Confluent and the modified.

The Distinct

The period of incubation is from ten to eighteen days it may be as short as five or as long as twenty, when produced by exposure to the poison.

When produced by inoculation

the period is usually shorter
from seven to nine days
as a general rule

Symptoms.

The disease sets in with
febrile symptoms: and
rigors followed by heat
and dryness of the skin
head and frontal pain
pains in the back, and
head and epigastrium.

The bowels are generally
constipated, with nausea
and vomiting & sometimes
delirium and general prostration. When it is fully
marked it cannot be

mistaken for any other compl-
aint. it is important to
recognize it at its commencement
for it may be sometimes
lessened by judicious treat-
ment. the symptoms
however that mark the
outset of all fatal diseases
are we very much the
same, but there are some
common in the commence
ment of small-pox, and
not in other fevers, which
may assist in our diagnosis
such as vomiting and pain
in the back are two.
another is knowing that

the disease is prevalent in the neighbourhood.

The eruption almost always begins to show itself on the third day of the fever after which the fever ceases in some degree, and the symptoms in general abate.

The eruption comes out first on the face then on the neck and wrists, then on the trunk and lastly it shows itself on the lower extremities this as a general rule wholes good, but sometimes [illegible].

In the distinct variety the papillae are smaller in size and fewer in number. at first they consist of red points which rise always into minute papillae containing on the third day a small vesicle, which contains a transparent serum at first, and in a short time after it is changed into a milky fluid, after which the pustule is slightly depressed at the top. the fluid then assumes a yellow collar.

maturation generally takes
place on the sixth day in
which the serum is changed
into pus, and all is
completed on the eighth day
from the appearance of
the eruption. And on
that day they begin to
break and a crust or
scab is formed.

Sometimes they do
not break but dry
up, and in about
four or five days the
scabs fall off, and leave
a depressed cor. which
is indelible. I should

have said when describing the pustules that the face becomes very much swollen and the skin between the pustules has a damask-red appearance.

Confluent form.

This form of the disease is decidedly more severe than the distinct. The eruption runs together, this constitutes the great mark of distinction between the two forms of disease. The face and scalp are always very

much swolen. and the
mucous membranes
are also very much
inflamed in this variety.
Solisotion is very often
aroused with difficulty.

The brain and nervous
system are also often
involved in the complications
of this form. and when
so it is generely fotol.
often also have violent
and uncontrollable deli-
rium, apparently depending
on excessive nervous
irritation alone.

There is no mitigation

of the symptoms on the
comming out of the Erup-
tion, on the contrary they
are generally more severe.

"We have secondary fever
also occuring during the
desication. in this form
depending on irritation
of the skin and sebaceous
tissue. generaly also there
is great restlessnes and
of an and adynamic char-
acter. this form differs
from the distinct-
form in six

First Mean is greater
intencity of fever

Secondly. The pustules or pimples run together.

Thirdly. in having inflimation of the mucos membrons

Forthly. The nervous system is often involved.

Fifthly. The symptoms do not abate on the appearance of the eruption.

Sixthly. we have secondary fever.

The eyes are often involved in the inflimation and the patient not unfrequently looses his sight. The ears are also often involved and

and deafness the result.

Or the patient may recover from an attack of Small-pox and be left in a Phthisical state or even with Phthisic or Erysipelas.

Diagnosis.

Before the Eruption makes its appearance, it is sometimes difficult, but can generally be made out by ascertaining weather the patient has been exposed to the contagion, also by ascertaining weather the patient has ever had

measles and scarlet
fever before or not

And after the ~~eruption~~
has made its appearance
by knowing that the
papillae are much harder
in small-pox than in
measles.

Prognosis.

The prognosis is unfavourable. It depends very much upon the quantity of Eruption, upon the state of the mucous membranes. state of the brain and nervous system, whose either are marked death

is almost always inevitable.
very much on the age and
habit of the patient.
much depend, also
on the nursing and on
ventilation of the apartments.

The average proportion
of deaths from this disease
is according to most
writers is about one in
four. The disease commonly
terminates fatally in about
ten or 17 days. The course
of death is numerous,

Death occurs sometimes
before the eruption makes
its appearance, sometimes

by or from suffocation, by excitement, and exaustion.

Pregnant women who are attact by the disies generaly suffer abortion and die in a few days.

Post mortem examination, we find the brain and Lungs disease and the gastro intestinal mucos membrane of the stomach is sometimes covered with pustules.

Cause

By contagion of a pecelion morbid character the nature of whose origine is totaly

unknown, all cases having been traced from contagion. of the poison from a person labouring under the disease.

Opinion is unsettled as to the period at which the disease is contagious. Some believe that it is not contagious for the first three days.

While others are of opinion that it can be communicated at any time from the beginning of the fever to the drying up of the pustules.

The mildest case may produce the most severe, and vice versa.

Certain dispositions seem to be more prone to it.

Also certain families appear to have an extraordinary susceptibility to the contagion.

The contagion readily attaches itself to the clothes and in that way may be conveyed from place to place. but will disappear by good ventilation.

The Poison either produces its effect by contagion Inoculation or by Infection

Treatment.

This for a long time was conducted upon an erroneous principle. The older physicians attempted to force out the eruption considering it the natural and only cure, did all they could to promote a copious eruption, by warm stimulating drinks and keeping the patient well covered in bed-clothes, and not allowing any fresh air in the room.

The celebrated John of Godderden even surrounded the patient with curtains, thinking

they possess a peculiar virtue. Sydenham was the first who employed the opposite or cool regimen, that is was the first who succeeded in establishing that method. The important indications of treatment are, never to attempt by violent means to break it up as it cannot be abruptly shortened. To moderate the pustulation secondly, to obviate inflammation thirdly, to support the system when required.

The comfort of the patient should always be studied

The treatment is to be conducted on general principles, there being no specific remedy for small-pox. Mild cases if not disturbed will of themselves run a favourable course, the patient being limited to cooling drinks during the fever and occasional laxative if the bowels are confined.

In severe cases it becomes necessary to interfere more at the commencement of the fever. a full dose of some cathartic should be given, and afterwards

the bowels should be
kept open by saline cathartics
Seidlitz powder is useful
in cases of irritable stomach.
If the skin is very
hot and dry it may be
sponged with cool water
Ice when can not be applied
it to extensively, warm
water may be more
freely employed, and
often affords relief.
If the pulse be strong
and full, and evidences of
inflammatory congestion, blood
may be taken from the
arm or by cups or leeches

applied in the vicinity of
the affected organ.

When there is much restlessness
or wakefulness, relief may be
obtained from opiates

After the appearance of
the eruption, little treatment
is required.

In the occurrence of
secondary fever the diaphoretic
and refrigerant plan of treat-
ment should be continued.
and to support the system
under the prostrating effects
of suppuration, whenever
thereupon the pulse begins
to become weak and the

tongue dry and dark, recourse should be had to tonics and stimulants, and also to nutritious diet, the best of which are quinic Peruvian bark &c.. and when the prostration is great, Ether, Brandy or the carbonate of ammonia.

In the malignant cases it is necessary to have recourse to the supporting plan of treatment early in the disease, or at any period at which malignancy shows its effects. Attention should also be paid to the disease

surface, Lotions of cold water may be applied to the face when much inflimation is present.

In consequence of the deposits which follows small pox, it has always been an object of interest to find some method to prevent pits or scars,

A great many remidies have been used for this purpose, such as opening the pustules after suppuration has commenced and pressing out the liquid.

Another method which is thought to be more effectual is that of cauterizing the pustules with nitrate of silver.

But Dr. Wood says the best plan is to open each pustule on the face, as soon as it becomes vesicular with a lancet and then to apply a stick or nitrate of silver brought to a fine point, or a strong solution by means of a probe.

This sometimes arrests the progress of the eruption and at the end of the week

the scabes fall off without leaving pits, to succeed the operation must be performed as early as the third or forth day.

Another method is the use of the mercurial plaster, the application of which is confined to the face the whole head should be covered except by the plaster openings being left for the eyes, nostrils and mouth, the plaster should be removed after the fourth or fifth day. If continued longer

it is apt to produce irritation, and afterwards mercurial salivation.

Sulphur ointment has also had good effects when applied early in the disease, and the tincture of Iodine has also been employed with apparent advantage, and several other remedies.

But none as yet has been discovered which will totally obliterate the pit.

An Inaugural Dissertation on Inguinal Hernia

Submitted to the Examination of the Provost, Regents and Faculty of the University of Maryland for the Degree of Doctor of Medicine

by

Claudel Buxley
of
Baltimore

1860

Inguinal Hernia.

Before defining Inguinal Hernia, or describing the various methods which are now resorted to for its relief or cure, I will advert briefly to the anatomy of the region in which it occurs.

The integument with its subcutaneous adipose tissue being removed from the inguinal region of the abdomen, a condensed cellular tissue is brought into view, which extends generally over the abdomen and also downwards over the thigh. This layer of cellular tissue is denominated abdominal fascia, and being from its thickness in this region divisible into two strata, these having received the appelations respectively of the superficial and profound abdominal fascia. While the former passes freely down upon the thigh, the

latter is arrested at Pouparts ligament, seeming lost at the outer part of the thigh by identifica-tion with the fascia lata femoris, and internally towards the symphysis pubis becoming folded up under Pouparts ligament so as to be attached to the linea ilio pectinea just externally to the third insertion of the external oblique muscle of the abdomen. By the removal of this fascia there is brought into view the tendon of the external oblique muscle passing from its origin from the ribs to its insertion into the linea alba abdominis, the symphysis pubis, the spine of the pubis, a part of the linea ileo pectinea and into Pouparts ligament, which latter however should perhaps rather be considered as consisting of the lower border of the tendon of the external oblique muscle, as it is stretched from the

anterior superior spine of the ilium to the spine of the pubis.

Just above the middle of this ligament the aponeurotic fibres of the external oblique muscle begin to separate, one bundle passing to be inserted into the symphysis pubis, the other into the spine of the pubis, and partly partly into the pectineal ridge: the superior bundle is called the internal or superior, and the other the external or inferior pillar of the inguinal ring, the space between the pillars being so called (inguinal ring) although it is of a somewhat triangular shape, the base of the triangle being downwards on the body of the pubis, and the apex of the triangular opening being upwards and outwards. This ring is also called the external, in contra

distinction to another yet to be described and which is named the internal inguinal ring. The apex of the triangular opening is sometimes rounded at the same time that it is much strengthened by a number of fibrous bands passing upwards and inwards being interlaced with the descending fibres of the aponeurotic tendon of the oblique muscle — these are called the bands of Darrach, who first called attention to them particularly. Through the opening thus described, there passes the spermatic cord in the male, and the round ligament of the uterus in the female. And from the margin of the ring there comes off a delicate cellular membrane which passes down and is lost on the cord, and which has been described as a fascia by some anatomists,

under the name of the Spermatic fascia.

Beneath the external oblique tendon just described lies the Internal oblique muscle of the abdomen the lower fibres of which have an origin from the crest of the Ilium and from about one half of Poupart's ligament externally, and sweep inwards and then downwards to be inserted by tendinous fibres into the linea alba, and symphysis pubis. As the fleshy fibres of this muscle are passing the pillars of the external ring a number of them are seen sweeping down upon the spermatic cord and forming loops upon it, even as far down in some instances as the testicles. These fibres constitute what is called the Cremaster muscle, and has been described by some as consisting of the lower fibres of

the internal oblique muscle, which in the passage of the testicle from the abdomen in fœtal life has been dragged down by that organ. Upon the removal of the lower portion of the internal oblique muscle, another muscular expansion is seen closely resembling the last named, this is the Transversalis abdominis muscle, which has an attachment in this region to the crest of the Ilium at its inner lip, throughout about two thirds of its extent, and also to about one third of Poupart's ligament, whence the fleshy fibres extend inwards and downwards in the general direction of the Internal oblique, and are inserted into the linea alba and symphysis pubis behind the former muscle. The fibres of this are scarcely as well developed as those of the Internal oblique; sometimes they descend so low as

to form a margin on a line with that muscle, at other times arising from a less portion of Poupart's ligament they do not extend so low. The muscle last described (Transversalis) is lined within by a fascia called also Transversalis, which on its arrival at the lower free margin of the muscle passes onward to Poupart's ligament thus filling up and defending the space between the lower edge of the muscle and the ligament.

Within the Transversalis fascia and co-extensive with it is a delicate cellular expansion, which by some anatomists is described as a distinct fascia under the name of the Fascia Propria. When subjected to considerable pressure and traction it sometimes becomes much thickened, and hence may justly be regarded as such; but generally it consists merely of a loose filmy

cellular medium of attachment between the transversalis fascia and the peritoneum, the serous lining of the abdomen, which is the last and very important membranous expansion in the order of superposition of the layers bearing relation to Inguinal Hernia.

About midway between the anterior superior spinous process of the Ilium and the spine of the Symphysis Pubis, and ordinarily from a half to three quarters of an inch above the line of Poupart's ligament a somewhat oval opening is formed in the Transversalis fascia, from the margin of which a delicate prolongation of the membrane descends upon the contained organ of the opening; the prolongation is called from its shape Infundibiform fascia, but it is only to be regarded as a descending process of the fascia

transversalis. The opening itself is called the Internal Inguinal or abdominal ring, and the space between it and the External Inguinal ring is the Inguinal Canal usually about one inch and a half in length, it is bounded anteriorly by the tendon of the External Oblique muscle; internally by the fascia transversalis; superiorly by the margins of the Internal Oblique and Transversalis muscles; and inferiorly by Poupart's ligament. The internal Inguinal ring gives egress to the spermatic cord in the male, and the round ligament of the Uterus in the female; the Inguinal canal transmits these; and the External Inguinal ring gives exit to them from the Abdomen. In conclusion of this brief anatomical description of this region we may add;

that, at the lower extremity or the outlet of the Inguinal Canal this is also fortified internally against protrusion by the outward insertion of a conjoined tendinous expansion of the Internal oblique and Transversalis muscle into the Pubis: and that also along the inner edge of the internal Inguinal ring, there runs a very important bloodvessel, the internal Epigastric artery, accompanied by its vena comites, as it is passing from its origin in the Femoral artery upwards and obliquely inwards to the margin of the Rectus muscle into which it passes to be ramified.

Notwithstanding the means which have been provided for the protection of this region against visceral protrusion, this never the less occurs, and when it takes place in the

part, the structure of which we have described above, it is known by the name of Inguinal Hernia.

I shall describe but two varieties of Inguinal Hernia, the Direct and the Oblique. In the Direct the protrusion takes place opposite to the external ring through which it passes, either pushing before it the posterior wall of the Inguinal Canal or else rupturing it. Its direction before it leaves the ring is forwards, afterwards however it is downwards, inclined inwards. Both the Spermatic cord, and the Epigastric artery lie upon its outer or iliac side.

In the Oblique variety of Inguinal Hernia the protrusion commences to take place at the internal ring. Its direction is forwards, downwards and inwards whilst it is within the Inguinal canal but when it has escaped through

the external abdominal ring its course is down-
wards and inwards. It lies in front of the
Spermatic cord, and has the internal epigastric
artery upon its inner side, between it and
the symphysis pubis.

The coverings of these varieties of hernia,
I shall speak of elsewhere and will merely
observe in this place that it is designed to
describe these as occurring in the Male. It
being understood that in the Female, the
Round Ligament of the Uterus bears the same
relation to the protrusions described that the
Spermatic cord does in the Male.

The varieties of Inguinal Hernia above
spoken of may be either reducible, irred-
ucible, or strangulated.

They are reducible when the protruded

viscera may be returned into the cavity of the abdomen.

In Inguinal Hernia a swelling exists in the groin which is increased by the erect posture, coughing, sneezing or by any motion which excites to contraction the diaphragm or abdominal muscles, and when the patient assumes the recumbent posture, the swelling generally disappears. If this be elastic and uniform, and if its reduction be sudden and accompanied by a gurgling sound, the hernia is formed of intestine; but if it feels doughy, and especially if it pits upon pressure, and returns gradually into the belly by the proper use of the taxis, it will be found composed of omentum. But if both these signs are combined, the hernia probably consists of both omentum and intestine.

The treatment of reducible hernia consists of first returning the intestine or omentum or both, into the cavity of the abdomen, and in the next place to retain them there. The first object is accomplished by placing the patient upon his back, when the hernia will not unfrequently return spontaneously, should it not do so however, the thigh should be flexed upon the abdomen, and the knee turned a little inward, so as to relax as much as possible the abdominal muscles, and the operation of the taxis resorted to, which consists in grasping and gently compressing the tumour with one hand, while with the finger and thumb of the other its contents are gradually pushed back into the abdomen, that which protruded last being the first that is returned. The second part of the treatment that

of keeping the viscera within the cavity of the abdomen is accomplished by the use of a truss. The pad of which occupying and pressing upon the spot where the hernia was, prevents its return; it may also by this pressure produce the thickening of the neck of the sac, and the cellular tissue which surrounds it, and thus close the communication between the cavity of the abdomen and the hernial sac. The question will naturally suggest itself as to how long it will be needful to wear a truss. This will depend upon the age of the patient, and the object to be fulfilled in its use. It is sometimes resorted to as a radical cure, sometimes as only a palliative treatment. In the young a cure may be accomplished in a year or more; in adults of moderate age if a cure be effected at all, it will require several years, and in the aged, the truss will have to be worn

and the time. In the last case a cure is not to be look-
-ed for.

A direct or oblique Inguinal Hernia is said to
be irreducible when it cannot be returned into the
cavity of the abdomen. The causes which prevent
reduction may be the disproportion in size of the
protruded parts to the opening through which they
have passed; tightness of the neck of the sac
caused by pressure upon it producing a degree of in-
-flammation which results in the effusion of
coagulable lymph, the organization of which oc-
-casions the structure; by adhesions of the protruded
viscera to the sac; and by the formation of membran-
-ous bands across it. The treatment in this stage
must be altogether palliative, as to endanger the
patient would not be justifiable whilst the hernia
is not worse and does not involve the question of life.

Violent exertion should be avoided. the tumour should be protected from external injury, the bowels should be kept open regularly, and the diet moderate. As long as inflammation does not exist the taxis might occasionally be resorted to aided by chloroform and cold applications, for what might prove irreducible upon one occasion, might be manipulated with more success at a subsequent period.

The third and last variety of inguinal hernia is the strangulated; which consists not only of an irreducible state of the protruded parts, but of such an amount of constriction as to prevent the passage of faeces through them. This constriction also excites violent inflammation or congestion, and finally gangrene from interrupted circulation of the blood-vessels of the protruded intestine. There is at first much general uneasiness and pain with a feeling

of constriction as though a cord were drawn tightly around the abdomen; and great tenderness of the tumour. Nausea and vomiting soon come on, first the contents of the stomach are thrown off, then bile in consequence of the inverted peristaltic action of the alimentary canal, and this is usually succeeded by the vomiting of fæcal matter, constipation exists throughout, and the pulse from contracted, hard and frequent becomes quite small, feeble, and often irregular. The countenance assumes a haggard and anxious expression, and eructations are succeeded by hiccough, while the surface of the body becomes covered with a cold clammy perspiration, and the extremities lose their natural temperature. All sense of pain is finally lost, and the tumour assumes a leaden hue. At this stage the patient often indulges the hope of recovery, because all feelings

of suffering have passed; but vain is his delusion for the icy hand has been laid upon him, and ere long he will be summoned to take "his chamber in the silent halls of Death."

There is perhaps no disease, which in its treatment requires more promptness in the surgeon, greater anatomical knowledge, clearness and coolness of judgment and decision & action than does strangulated inguinal hernia. No time is to be lost in consultation, or in the experimenting with palliative remedies. Manipulation by taxis having been once fully, and carefully tried, with the aid of chloroform, and cold applications and found ineffectual, an operation should be resorted to at once. Little danger is to be apprehended from the skillful use of the knife, the chief source of peril is in delay, and the reason why strangulated

inguinal hernia so often proves fatal is not attributable so much to the operation as to the time that is lost in gaining the assent of the patient or friends to a resort to it.

The operation having been determined upon, the patient should be placed on a table before a good light with the shoulders slightly elevated, and the thighs flexed in order that the abdominal muscles may be relaxed; the surgeon then places himself in that position which will afford him the greatest ease and comfort, and by the aid of an assistant pinches up a portion of the integument, transversely to and immediately over the tumour and with a scalpel makes an incision in the direction of its long diameter. A skillful operator might make this incision without pinching up the integument, and even complete the operation without

the aid of a director, yet, however true might be his eye, however perfect his anatomical knowledge, and though his hand be like iron, when we consider that a cough, the heaving of a sigh an involuntary struggle on the part of the patient, might endanger the cutting too deeply, and thus involve human life, it seems advisable to always use the director, and thus assure safety. If the hernia be Direct, after the common integument and abdominal fascia have been passed through, the external spermatic fascia is brought into view, which should be opened by aid of the director to the extent of the external incision; next the fascia transversalis is to be divided, which brings into view the fascia propria as anatomically described, the division of which reveals the hernial sac, which consists of peritoneum, this should be opened with the greatest

care, lest the intestines which lie immediately beneath should be wounded. The seats of stricture in Direct Hernia, are either the external ring, the lower border of the internal obligue and transversalis muscles, or the neck of the sac itself. In dividing the stricture, the curved and probe pointed bistoury should be introduced lying flat upon the index finger of the operator, and having reached the seat of stricture, turn the knife with its cutting edge upwards, and make a slight incision in that direction, to avoid wounding the epigastric artery which lies upon its outer side.

If the hernia be Obligue the first incision should be more extensive. After the integument and abdominal fascia have been divided, the spermatic fascia, the fascia which lie beneath it as in Direct Hernia, and lastly the peritoneum, are

to be separated, with the same careful use of the director as in the last named. The next step in the operation is to ascertain the point of stricture, and introducing the bistoury on the palmar surface of the index finger as has been before described, the point of the stricture should be divided; which will be found to consist of either the external or internal ring, the lower border of the internal oblique and transversalis, or the neck of the sac. The direction of the incision should be upwards as in Direct Hernia, in order to avoid the internal epigastric artery, which however in Oblique hernia lies on the inside of the protrusion.

In either of the varieties of Inguinal Hernia, when the hernial sac is opened, if adhesions do not exist to any extent, a dark coffee colored fluid generally escapes. If upon opening the peritoneal sac adhesions

of the viscera are found they should if possible be separated, as the movement of the faeces through the alimentary canal would be much embarrassed, if the intestines were returned into the cavity of the abdomen glued together. The viscera should be returned with very careful handling, and piece by piece.

Should the intestins be in a gangrenous state, this will be apparent both by the constitutional symptoms heretofore described, and by the appearance of the hernial tumour. The intestins finally ulcerate and slough, and the faeces escape forming an artificial anus, which, if the patient survives, renders him miserable for the remainder of his existence.

The viscera having been returned the wound should be closed by the needful number of interrupted sutures, and adhesive strips. Patent lint folded into a

compress should be applied over the wound, and a ban-
-dage adapted so as to give the parts comfort and support.

But the treatment of hernia by no means ends with
the operation; the after treatment requires great skill
and judgment. If not moved spontaneously,
the bowels should be opened by a gentle laxative;
and if restless and sleepless, an anodyne may
be resorted to. If highly inflammatory symptoms
should be lighted up, depletion either general
or local must be used, according to the require-
-ments of the case. The diet should be light;
and fluid nourishment is preferable; per-
-fect rest should be enjoined and freedom
from all causes of excitement

The position of the patient in bed, should
be with the shoulders slightly elevated, and
the thigh of the affected side moderately

moderately flexed upon the pelvis, supported upon pillows.

The operation for hernia will not insure the non occurrence of the disease and patients will therefore be obliged to wear a truss upon leaving the recumbent posture.

An

Inaugural Dissertation

on

Malarious Fevers,

Submitted to the Examination

of the

Provost, Regents & Faculty of Physic,

of the

University of Maryland,

or the

Degree of Doctor of Medicine,

by

Edwin Edrecksen,

of

[illegible]

A.D. 1860.

Malarious Fevers.

That class of diseases recognised as Malarious Fevers which prevail so commonly and extensively within the Tropics, and to a certain extent also within the Temperate Zone, in regions of the country where vegetation is in rank and an occasional submergence of the soil tends to promote its decomposition, includes all those forms of fever which result from exposure to the poisonous influences of what is termed Miasmata or Malaria.

This substance, the true nature of which is as yet enshrouded in mystery, is supposed to be a gaseous or vaporous exhalation emanating from

vegetable matter in a state of decomposition [illegible] circumstances of heat and moisture, and seems to require for the full development of all its strength and activity a concurrence of the three,

With regards to it, many and various speculations have been indulged in by medical writers for years past, but apparently to little purpose, as its true nature seems to be but little if any better known now, than when its existence first became suspected, the fact that it does exist and as the product of vegetable decomposition, seems undeniable, although some writers of eminence still assert the contrary opinion, but its obvious

and uniform effects, witnessed commonly in the sections of the country subjected to its noxious influences, seems evidence sufficient to substantiate the affirmative position; but the settlement of this disputed question I leave to those better qualified to do it justice, I do no more than advert to it and continue upon the presumption that it is an acknowledged fact.

The degree of heat requisite for the introduction of Malaria exceeds that of 60 degrees of Fahrenheit. This is evident, as the unpleasant effects attributed to it, and by which only its presence is made known, seldom if ever occur at a temperature less than

that, even where there is decaying vegetation in abundance, but where there occurs a temperature of 80 degrees and upwards continued for a certain length of time, it is generated most prolifically, for although in high latitudes there may occur many days on which the temperature may attain the malarious point if we may so express it, yet apparently owing to the short duration of the hot season no malaria seems to be evolved, or at least none of its bad effects become evident in the forms in which it usually makes itself known in more southern latitudes, on the other hand the nearer the Tropics are ap-

[illegible] the temperature of the atmosphere, continued uninterruptedly for a length of time, the more intense efficacy becomes the cause, and generally as a consequence the more violent and fatal its effects,

As above suggested moisture also to a certain extent seems a requisite agent for the production of this deleterious effluvia, but an abundance of it is supposed often to act as a preventive, This opinion is based upon the supposition that there is little or no affinity between it and malaria, and that water in a state of liquidity, or in the form of frost or fog,

possesses this power of absorbing and retaining it in solution, and upon this principle many otherwise inexplicable points are explained. The fact that many and continual rains serve to lessen the malarious influences, by washing the atmosphere clear of the poisonous exhalation, is so accounted for, and in a similar manner also may be explained the fact that an evident protection is afforded to a usually unhealthy district by the submergence of the low and marshy places. The excess of water apparently for the time either decreases or entirely stops the decomposition of the vegetable matter, and thus checks the evolution

of the poison, or else by absorbing and retaining it in solution as it is [illegible] it is only while there exists an [illegible] of moisture that such immunity [illegible] times, for the danger returns again after the subsidence of the water, and when accompanied by the requisite degree of heat, the afflicted healthy district again abounds in all that is necessary for the production of the poison in abundance, and of course is followed by a renewal of all the pernicious influences attendant thereon, with redoubled violence. Thus may be explained the [illegible] in tropical climates during

after the cessation of their [illegible]
rainy seasons, and in this way also [illegible]
[illegible] an explanation of the fact, that
[illegible]ctions of the country [illegible]
[illegible] sudden [illegible]
[illegible] afflictions entailed upon a
miasmatic region by the accidental or
intentional submergence and subsequent
drainage of meadows or fields that had
been previously dry, or by the draining
of lakes, ponds &c, or by the drawing
off the water from old mill dams, Ca-
nals &c. thereby exposing their [illegible]
already possessing in abundance two
of the requisites, viz. Vegetable matter
in a state of decay, and moisture, to

The direct rays of the sun which produce the miasma in all its virulence, followed by all its evil effects.

The precise nature of the malaria remains still a mystery. Every evil haunts have been searched for it in vain. The air of miasmatic regions has been examined, and the waters of marshes and bogs have been analyzed repeatedly, but to no purpose. It has baffled the most expert chemists and set at defiance the most learned philosophers, nevertheless many interesting and important facts have been learned regarding its habits, characteristics &c. It usually affects all low situations, as low grounds,

the surface of [illegible] and the [illegible] [illegible], This seems owing to its [illegible] specific gravity, or what is [illegible] probable to its affinity for [illegible] in the form of mist or fog, that is almost always under such circumstances collected in the atmosphere near the earth's surface, such locations are therefore esteemed particularly dangerous, and the more dangerous the nearer the ground,

This is made evident by the various instances on record where it has affected differently the various lodgers in the same house, occupying apartments on the upper and lower floors, those above escaping, whilst those below become subjected to all its evil influen-

ces, The night air also in such regions seems to be peculiarly obnoxious, and unnecessary exposure thereto should be sedulously avoided, The foggy airs of early morning, and after sunset in the evening, have ever been considered particularly prejudicial to health in miasmatic climates, Persons who restrict themselves to leaving their houses only after the sun has dissipated the morning mists, and returning again before the falling of the evening dews, are generally very likely to escape entirely,

A circumstance of great importance attending this subject is the fact that the malaria is capable of being

[illegible] sometimes to a very considerable distance, In this way may [illegible] some facts not easily accounted [illegible] otherwise, Sections of the country possessing none of the requisites [illegible] generation of the poisonous effluvia, may and sometimes do in this way become subjected to all the evils arising therefrom by having the poison conveyed to them by a favourable wind setting from the direction of some portion of the country where it abounds, whilst the location whence the exhalations arise may for the same reason be comparatively healthy,

Another well established and very curious fact with regard to this subject, is the evident incompatibility existing between the malaria and the atmosphere of large cities. Malarious diseases occasionally but rarely originate in populous portions of a city, where there may be decaying vegetable matter in abundance, accompanied by all else that is required for the generation of the poison. The surrounding country may abound with it, but the inhabitants of the city so long as they confine themselves to their own limits are not susceptible to contract the disease. This immunity is attributable to various cau-

es, [illegible] probable of which is the constant fires kept up by the inhabitants which in some way seems to neutralize or otherwise obviate the bad effects of the poison,

The evil influences of the Malarious poison is suspected of complicating many diseases very seriously, rendering them more painful and hazardous to the patient, more difficult and unmanageable to treat, and consequently more annoying and perplexing to the physician, but its most obvious effect on the human family is the production of those diseases called Malarious Fevers,

These affections although possessing

many points of distinction, and treated of usually under distinct heads as Intermittent, and Remittent fevers, undoubtedly eminate from the same cause, and cannot therefore properly be recognised as different diseases, but should be considered merely as varieties of the same complaint modified by such attendant circumstances as location, susceptibility of the patient, intensity of the exciting cause &c. The several [illegible]

vent a recurrence of the paroxysm,
namely [illegible]
great [illegible] & cathartic dose
should be given, and for this pur-
[illegible]
of cases is undoubtedly the best,
[illegible] its operation Peruvian Bark,
or what is generally preferable, in
sulphate of Quinine, should be exhib-
ited, Other preparations of Cincho-
na are used; but the one named
is unquestionably to be preferred
as the most certain, For intermit-
tent fever in an uncomplicated
form it is deemed a specific,
In anemic and unmanageable